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Presidential Documents

Executive Order 13713 of December 11, 2015

Half-Day Closing of Executive Departments and Agencies of the Federal Government on Thursday, December 24, 2015

By the authority vested in me as President of the United States of America, by the Constitution and the laws of the United States, it is hereby ordered as follows:

Section 1. All executive branch departments and agencies of the Federal Government shall be closed and their employees excused from duty for the last half of the scheduled workday on Thursday, December 24, 2015, the day before Christmas Day, except as provided in section 2 of this order.

Sec. 2. The heads of executive branch departments and agencies may determine that certain offices and installations of their organizations, or parts thereof, must remain open and that certain employees must remain on duty for the full scheduled workday on December 24, 2015, for reasons of national security, defense, or other public need.

Sec. 3. Thursday, December 24, 2015, shall be considered as falling within the scope of Executive Order 11582 of February 11, 1971, and of 5 U.S.C. 5546 and 6103(b) and other similar statutes insofar as they relate to the pay and leave of employees of the United States.

Sec. 4. The Director of the Office of Personnel Management shall take such actions as may be necessary to implement this order.

Sec. 5. *General Provisions.* (a) This order shall be implemented consistent with applicable law and subject to the availability of appropriations.

(b) Nothing in this order shall be construed to impair or otherwise affect:

(i) the authority granted by law to an executive department or agency, or the head thereof; or

(ii) the functions of the Director of the Office of Management and Budget relating to budgetary, administrative, or legislative proposals.

(c) This order is not intended to, and does not, create any right or benefit, substantive or procedural, enforceable at law or in equity by any party against the United States, its departments, agencies, or entities, its officers, employees, or agents, or any other person.

THE WHITE HOUSE,
December 11, 2015.

[FR Doc. 2015–31749
Filed 12–15–15; 8:45 am]
Billing code 3295–F6–P

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DEPARTMENT OF AGRICULTURE

Commodity Credit Corporation

7 CFR Part 1400

RIN 0560–AI31

Payment Limitation and Payment Eligibility; Actively Engaged in Farming

AGENCY: Commodity Credit Corporation, USDA.

ACTION: Final rule.

SUMMARY: This rule changes the requirements for a person to be considered actively engaged in farming for the purpose of payment eligibility for certain Farm Service Agency (FSA) and Commodity Credit Corporation (CCC) programs. Specifically, this rule amends and clarifies the requirements for a significant contribution of active personal management to a farming operation. These changes are required by the Agricultural Act of 2014 (the 2014 Farm Bill). The provisions of this rule do not apply to persons or entities comprised entirely of family members. The rule does not change the existing regulations as they relate to contributions of land, capital, equipment, or labor, or the existing regulations related to landowners with a risk in the crop or to spouses. This rule will apply to eligibility for payments earned for the 2016 crop or program year for farming operations with only 2016 spring planted crops, and to eligibility for payments for the 2017 and subsequent crop or program years for all farming operations (those with either spring or fall planted crops).

DATES: This rule is effective December 16, 2015.

FOR FURTHER INFORMATION CONTACT: James Baxa; Telephone: (202) 720–7641. Persons with disabilities who require alternative means for communication should contact the USDA Target Center at (202) 720–2600 (voice).

SUPPLEMENTARY INFORMATION:

Overview

CCC programs managed by FSA, specifically the Market Loan Gains (MLG) and Loan Deficiency Payments (LDP) associated with the Marketing Assistance Loan (MAL) Program, the Agriculture Risk Coverage (ARC) Program, and the Price Loss Coverage (PLC) Program, require that a person or legal entity be ''actively engaged in farming'' as a condition of eligibility for payments. As specified in 7 CFR part 1400, a person or legal entity must contribute: (1) Land, capital, or equipment; and (2) active personal labor, active personal management, or a combination of active personal labor and active personal management to be considered ''actively engaged in farming'' for the purposes of payment eligibility.

Section 1604 of the 2014 Farm Bill (Pub. L. 113–79) requires the Secretary of Agriculture to define in regulations what constitutes a ''significant contribution of active personal management'' for the purpose of payment eligibility. CCC published a proposed rule in the **Federal Register** on March 26, 2015, (80 FR 15916–15921) to implement the changes required by the 2014 Farm Bill. CCC received 95 comments on the proposed rule. The comments and responses are discussed later in this document. No major changes are being made in response to comments, because FSA has determined that the comments support the definitions and requirements for ''actively engaged in farming'' specified in the proposed rule and support limiting eligibility for farm payments. Also, there was no consensus amongst the comments for any alternative payment eligibility provisions that would address the 2014 Farm Bill requirements. FSA has made minor changes from the proposed rule in this final rule to respond to commenters' requests for clarifications of certain provisions.

As specified in the proposed rule, this final rule amends 7 CFR part 1400 to define what constitutes a significant contribution of active personal management and to revise the requirements for active personal management contributions. The 2014 Farm Bill also directed the Secretary to consider the establishment of limits on the number of persons per farming operation who may be considered actively engaged in farming based on a significant contribution of active personal management. Based on this directive, a limit was established in the proposed rule and this final rule therefore amends 7 CFR part 1400 to set a limit on the number of persons per farming operation who may qualify as actively engaged in farming based on a significant contribution of active personal management, or a combination of active personal management and active personal labor. The new requirements and definitions are specified in a new subpart G to 7 CFR part 1400.

Exceptions for Entities Comprised Solely of Family Members

As required by the 2014 Farm Bill, the provisions of this rule do not apply to farming operations comprised solely of family members. This rule does not revise the definition of ''family member.'' As specified in 7 CFR 1400.3, a family member is ''a person to whom another member in the farming operation is related as a lineal ancestor, lineal descendant, sibling, spouse, or otherwise by marriage.'' This definition is consistent with 7 U.S.C. 1308, which is the authority for the definition. FSA handbooks further clarify that eligible family members include: Great grandparent, grandparent, parent, child, including legally adopted children and stepchildren, grandchild, great grandchild, or a spouse or sibling of family members.

In 7 CFR 1400.208, there are existing provisions for family members to be considered actively engaged in farming by making a significant contribution of active personal labor, or active personal management, or a combination thereof, to a farming operation comprised of a majority of family members, without making a contribution of land, equipment, or capital. The new subpart G does not change these provisions.

Existing Provisions and Exceptions for Actively Engaged Requirements That Are Not Changed

As specified in the current regulations, there are exceptions to the requirement that a person must contribute labor or management to be considered actively engaged in farming.

These exceptions for certain landowners and for spouses are not changed with this rule. Specifically, a person or legal entity that is a landowner who makes a significant contribution of owned land to the farming operation and receives rent or income for such use of the land based on the land's production or the operation's operating results, and who therefore shares a financial risk in the crop (profit or loss is based on value of crop and not from a fixed rent amount) is considered to be actively engaged. A landowner who meets that requirement of sharing financial risk in the crop is not required to contribute labor or management to be considered actively engaged in farming. If one spouse, or an estate of a deceased spouse, is considered to be actively engaged in farming the other spouse is considered to be actively engaged without making a separate, additional contribution of management or labor. The spouse exemption as specified in the current regulations applies regardless of whether the other spouse has qualified as actively engaged through a contribution of management or labor or as a landowner sharing risk in the crop.

The final rule specifies how persons and legal entities comprised of nonfamily members may be determined eligible for payments, based on a contribution of active personal management made by persons with a direct or indirect interest in the farming operation. Payments made to persons or legal entities are attributed to persons as specified in 7 CFR 1400.105 and the methods for attribution remain unchanged with this rule.

Additional Requirements for Certain Nonfamily General Partnerships and Joint Ventures

The revised definition of what constitutes a significant contribution of active personal management in this rule apply only to certain nonfamily farming operations seeking to have more than one person qualify as actively engaged in farming by providing a significant contribution of active personal management. Such person is referred to as a ''farm manager'' for the purposes of this rule. This rule only applies to farming operations structured as general partnerships or joint ventures that seek to qualify more than one farm manager. The existing requirements that farming operations supply information to FSA county committees (COC) on each member's contribution or expected contribution of labor or management related to actively engaged determinations remain unchanged and continue to apply. However, each of the members of farming operations subject to this final rule that are determined to be actively engaged in farming by their contribution of active personal management, or the contribution of the combination of active personal labor and active personal management, will also be required to keep and provide a management log.

For most farming operations that are legal entities, such as corporations and limited liability companies, adding an additional member to the entity does not affect the number of payment limits available; it simply increases the number of members that can share a single $125,000 payment limit, should such a limit be reached. But for general partnerships and joint ventures, adding another member to the operation can provide the availability of an additional $125,000 payment limit if the new member meets the other eligibility requirements, including being determined as actively engaged in farming. This potential for a farming operation being able to qualify for multiple payment limits provides an opportunity to add members and to have those members claim actively engaged in farming status, each with an additional and separate payment limitation, especially for farming operations earning annual program payments in an amount close to or in excess of the payment limitation.

For this reason, several additional requirements now apply to nonfamily farming operations seeking to qualify more than one farm manager. Specifically, in addition to the existing requirements that farming operations must provide information to FSA on how each of their members qualify as actively engaged based on a contribution of labor, management, land, capital, and equipment, a limit is placed on the number of members of a farming operation that can be qualified as a farm manager. Also, an additional recordkeeping requirement now applies for each member of such farming operations contributing any active personal management. These additional requirements also apply to individuals requesting to qualify with a combination of labor and management if their farming operation is seeking to have more than one farm manager (combinations of labor and management can qualify as actively engaged in farming).

Number of Farm Managers That May Qualify As Actively Engaged

This rule restricts the number of farm managers to one person per farming operation, with exceptions. Nonfamily farming operations seeking only one member to qualify as actively engaged in farming with only a significant contribution of management or a combination of labor and management (one farm manager) are not subject to the new requirements of 7 CFR part 1400 subpart G. They are still, however, subject to the existing requirements of being actively engaged, as they were prior to this rule. In other words, such operations will continue to be subject to the existing regulations in subparts A and C of 7 CFR part 1400 that specify the requirements to be considered actively engaged in farming.

Any farming operation seeking two or three farm managers must meet the requirements of subpart G for all farm managers in the farming operation, including documenting that each of the two (or three) individuals are actively engaged in farming by their contribution of active personal management (or a combination of labor and management) by the maintenance of the records or logs discussed below for all the members in the farming operation. If one person of the farming operation meets the requirements for being actively engaged in farming by making a contribution of active personal management, and that farming operation seeks to qualify an additional farm manager, the farming operation must meet the requirements that it is a large operation or a complex operation as specified in this rule. To qualify a total of three farm managers, the operation is required to meet the requirements specified in this rule for both size and complexity. In other words, a very large farm operation that is not complex (for example, one growing a single crop) may only qualify for two farm managers, not three. Under no circumstances is a farming operation allowed to qualify more than a total of three persons as farm managers.

The default standard for what constitutes a large farming operation is an operation with crops on more than 2,500 acres (planted or prevented planted) or honey or wool with more than 10,000 hives or 3,500 ewes, respectively. The acreage standard is based on an analysis of responses to the Agricultural Resource Management Survey (ARMS) conducted by the USDA Economic Research Service and National Agricultural Statistics Service. The results of that survey indicate that on average, farms producing eligible commodities that required more than one full time manager equivalent (2,040 hours of management) had a size of 2,527 acres. (See *http://www.ers.usda.gov/data-products/arms-farm-financial-and-crop-production-practices.aspx* for more information on the survey.) The size standards for

honey and wool did not have comparable survey information available. The honey standard for the number of hives is based on the beekeepers participating in 2011 through 2012 Emergency Assistance for Livestock, Honey Bees, and Farm-Raised Fish that met or exceeded the payment limit. These large operations averaged 10,323 hives. The standard established for sheep was based on industry analysis that showed that operations with 1,500 through 2,000 ewes could be full time. The 3,500 ewes standard is approximately double that threshold. Each State FSA committee (STC) has authority to modify these size standards for their state based on the STC's determination of the relative size of farming operations in the state by up to 15 percent (that is plus or minus 375 acres, 1,500 hives, or 525 ewes). In other words, the standard in a particular state may range from 2,125 acres to 2,875 acres; 8,500 to 11,500 hives; or 2,975 to 4,025 ewes. Any deviation from the State level standards may only be granted on a case by case basis by the FSA Deputy Administrator for Farm Programs (DAFP).

If a farming operation seeks an additional farm manager based on the complexity of the operation, such operation must make a request to the FSA state committee that demonstrates complexity by addressing the factors established in this rule. The complexity factors specified in this rule take into account the diversity of the operation including the number of agricultural commodities produced; whether irrigation is used; the types of agricultural crops produced such as field, vegetable, or orchard crops; the geographical area in which an operation farms and produces agricultural commodities; alternative marketing channels (that is, fresh, wholesale, farmers market, or organic); and other aspects about the farming operation such as the production of livestock, types of livestock, and the various livestock products produced and marketed annually. The addition of a second or third farm manager to be considered actively engaged in farming must be approved by the STC, and is subject to review by DAFP. The final review and concurrence by DAFP is intended to ensure consistency and fairness on a national level.

Records on the Performance of Management Activities

As specified in this final rule, if a farming operation seeks to qualify more than one farm manager as actively engaged in farming, then all persons that provide any management to the farming operation are required to maintain contemporaneous records or activity logs of their management activities, including the management activities that may not qualify as active personal management under this rule. Specifically, activity logs must include information about the hours of management performed for the farming operation. While the recordkeeping requirements under this rule are similar to the current provisions at 7 CFR 1400.203 and 1400.204 in which contributions must be identifiable and documentable, and separate and distinct from the contributions of other members, these additional records or logs must also include the location of where the management activity was performed (either on-site or remote) and the time expended or duration of the management activity performed. These records and logs must be made available if requested by the appropriate FSA reviewing authority. If a person or member initially determined as actively engaged in farming by a represented contribution of active personal management to the farming operation fails to provide these management activity records within a reasonable amount on time, usually 30 days, the represented contribution of active personal management will be disregarded and the person's eligibility for payments will be re-determined.

Section 1604 of the Farm Bill requires USDA to ensure that any additional paperwork required by this rule be limited only to persons in farming operations who would be subject to this rule. As described above, the additional recording and recordkeeping requirements of this rule only apply to persons in farming operations that seek to qualify more than one farm manager as actively engaged in farming.

New Definition of Significant Contribution of Active Personal Management

The existing definition of a ''significant contribution'' in 7 CFR 1400.3 specifies that for active personal management, a significant contribution includes ''activities that are critical to the profitability of the farming operation,'' but that definition does not specify what specific types of activities are included, whether these activities need to be direct actions and not passive activities, and to what level or quantity such activities must be performed to achieve a level of significance.

This final rule specifies a new definition of ''significant contribution of active personal management'' that applies only to non-family farming operations that seek to qualify more than one person as a farm manager. Similar to the existing requirements in 7 CFR 1400.3 for a substantial amount of active personal labor, the new definition for a significant contribution of active personal management requires an annual contribution of 500 hours of management, or at least 25 percent of the total management required for that operation. This final rule also adds a new, more specific definition for ''active personal management'' that includes a list of critical management activities that qualify as a significant contribution if such activities are annually performed to either of the minimum levels established (500 hours or 25 percent of the total management hours required for the operation on an annual basis).

The new definition changes what constitutes ''active personal management'' only for farm managers in nonfamily farming operations seeking to qualify two or three farm managers. The requirements for such farm managers clarify that eligible management activities are critical actions performed under one or more of the following categories:

- Capital, land, and safety-net programs: Arrange financing, manage capital, acquire equipment, negotiate land acquisition and leases, and manage insurance or USDA program participation;
- Labor: Hire and manage labor; and
- Agronomics and Marketing: Decide which crop(s) to plant, purchase inputs, manage crops, price crops, and market crops or futures.

The management activities described place emphasis on actions taken or performed by the person directly for the benefit and success of the farming operation. Passive management activities such as attendance of board meetings or conference calls, or watching commodity markets or input markets (without making trades), are not considered as making a significant contribution of active personal management. Only critical actions as specified in the new definition of ''active personal management'' are counted towards the required hourly threshold for a significant contribution of active personal management.

As required by the 2014 Farm Bill, the new definition and requirements in the final rule take into account the size and complexity of farming operations across all parts of the country. The final rule also takes into consideration all of the actions of the farming operation associated with the financing; crop selection and planting decisions; land acquisitions and retention of the land assets for an extended period of time; risk management and crop insurance

decisions; purchases of inputs and services; utilization of the most efficient field practices; and prudent marketing decisions. Furthermore, this new definition takes into account advancements in farming, communication, and marketing technologies that producers must avail themselves to remain competitive and economically viable operations in today's farming world.

Eligible management activities include the activities required for the farming operation as a whole, not just activities for the programs to which the ''actively engaged in farming'' requirement applies. For example, if a farming operation is participating in ARC or PLC and using grain produced under those programs to feed dairy cattle, those management activities with respect to the dairy component of the operation can be considered for eligibility purposes to qualify a farm manager. Similarly, if a farming operation receives MLG or LDPs on some crops, but not on others, all the management activities for all the crops are considered for eligibility purposes.

The final rule clarifies that the significant contribution of a person's active management may be used only to qualify one person or legal entity in a farming operation as meeting the requirements of being actively engaged in farming. For example, if members of a joint operation are entities, one person's contribution will only count toward qualifying one of the entities (and not any other entity to which the person belongs), as actively engaged in farming.

Summary of Comments Received and FSA Responses

The 60 day comment period on the proposed rule ended May 26, 2015. CCC received 95 comments on the proposed rule. Comments were received from individual farmers, members of the public, slow food and sustainable agriculture groups, environmental groups, rural advocacy groups, the USDA Office of the Inspector General, an FSA employee, and groups representing farmers and growers. Most of the comments supported the idea of restricting eligibility for farm payments, but many of those supportive comments also suggested additional restrictions on eligibility. The rest of the comments, primarily from groups representing farmers and growers, did not support restricting eligibility for farm payments based on active contribution of management, or suggested that additional persons be made eligible for payment.

Many of the suggestions to further restrict farm program payments were out of scope or exceed FSA's authority. For example, some commenters objected to the family member operation exemption that is required by the 2014 Farm Bill. The suggestion of one payment limit per farm, no exceptions, would eliminate the spouse exemption for actively engaged in farming, which FSA does not have authority to change. Other suggestions were good ideas that are already addressed by existing regulations. For example, the attribution rules already specified in 7 CFR part 1400 prevent one person from earning multiple payment limitations based on their participation in multiple farming enterprises.

The following discussion summarizes the issues raised by commenters, and FSA's responses to those comments as reflected in this rule:

Family Members and Family Farm Exemptions

Comment: The new requirements on the contribution of active personal management should be applied to all farming operations including family operations as a matter of clarity and equity.

Response: Section 1604(c) of the 2014 Farm Bill specifically states that any revisions to the actively engaged in farming provisions will not apply to farming operations comprised entirely of family members. Therefore, no change to the rule is made in response to this comment.

Comment: The definition of family member should be extended an additional generation to great great grandchildren.

Response: If such a familial relationship of great great grandparent and great great grandchild is represented between members in the same farming operation, who are both currently members at the same time of such farming operation, this would fall under the existing definition of family member because the great great grandchild is a lineal descendant of the great great grandparent and would therefore be recognized as such by the FSA reviewing authority. No revision to the rule or handbooks is needed to accommodate five generations within the same farming operation in the application of this rule.

Comment: FSA should interpret the definition of family member to include cousins, nieces, nephews, aunts, and uncles. While not lineal descendants, an extended family relationship exists between such individuals that many times are involved in the same farming operations.

Response: The existing definition of family member in 7 U.S.C. 1308 is centered on the term lineal descendant. FSA does not have authority to revise the current definition of family member in 7 CFR part 1400 and therefore, cousin, niece, nephew, aunt, and uncle will not be included or considered to be included as a family member under the current definition. No change is made to the definition of ''family member.''

Comment: The changing legal landscape regarding definitions of marriage, and the effect, if any, it has on the related definitions within the rule, should be considered for this rule.

Response: The text in 7 CFR part 1400 refers only to ''spouse'' and has no reference to husbands or wives. No revisions to the regulations are necessary to address the issue of marriage equality.

Comment: Given the importance now placed on family members for operations to meet specific payment eligibility requirements, clarification is needed regarding the continuity of a farming operation's eligibility and the immediate consequences of unplanned events such as death, incapacitation, or forced retirement of a family member that otherwise negates this family relationship amongst all members. (For example, a grandparent retires from the operation, and one of the grandchildren remaining is a cousin but not a lineal descendent or sibling of any other remaining members.) Furthermore, FSA should consider a ''grandfather clause'' for existing members of a family farming operation (non-lineal descendants) that have succeeded former members due to death or retirement of a parent or grandparent.

Response: Current regulation and FSA policy as specified in the handbooks provide that if an individual is determined to be actively engaged in farming and is otherwise eligible to receive program benefits subsequently dies or becomes incapacitated and is no longer able to make contributions to the farming operation, that person is considered to be actively engaged in farming and eligible for the duration of the program year. Consistent with this policy, eligibility determinations for a farming operation and its members for a specific program year, and that are dependent upon the family member exemption, will remain effective for the entire program year regardless of when the death, disability, or incapacitation of a family member occurred during the same program year. Then, for the following program year, new determinations for payment eligibility and payment limitation purposes will be made by FSA based on the

representations made by the farming operation, and its members, and applicable rules in effect at that time.

Regarding ''grandfathering'' existing members of a farming operation, as noted above, the eligibility of a particular person or operation is effective for a program year. No other accommodations for additional years will be adopted or allowed based on the historical relationship of an operation's former members, because we do not have the authority to do so. The definition of ''family member'' as specified in 7 U.S.C. 1308 specifies that a family member is one to whom ''a member in the farming operation is related as lineal ancestor, lineal descendant, sibling, spouse, or otherwise by marriage.'' The plain language meaning of the authority is that a family member is one who is currently related to another member of the farming operation, and does not include a historical relationship for one who was related to someone who was formerly in the farming operation. Therefore, no change to the rule is made in response to this comment.

Implementation Timing

Comment: If the rule is making the changes in requirements for certain producers' eligibility effective for the 2016 crop year, we will have only a few months to potentially reorganize a farm operation to come into compliance. The effective date for the implementation of all changes to the actively engaged in farming provisions should be postponed until at least the 2017 crop year.

Response: There is no requirement that a farm operation needs to be reorganized to come into compliance with the rule changes; the rule changes how many payment limitations the farming operation may qualify for based on managers' activities and the size and complexity of the farming operation. We have considered the implementation timing and made a change in the in response to this comment and will make the rule effective for the 2016 crop year for producers who only have spring planted covered crops and loan commodity crops and effective for the 2017 crop year for producers who have both spring and fall planted covered crops and loan commodity crops.

Definitions

Comment: Although we are in agreement to FSA's new definition of active person management and the categories of management activities, FSA should include all of the management activities found in the Joint Explanatory Statement of the Committee of Conference (commonly referred to as the Managers' Report) on the 2014 Farm Bill.

Response: FSA handbook instructions will be revised to include a list of all eligible management activities. The rule specifies the categories, and the handbook provides more details, so the categories are applied consistently. Therefore, no change to the rule is made in response to this comment.

Comment: The phrase ''critical to the profitability of a farming operation'' used in the description of a significant contribution of active person management should be defined in the final rule.

Response: The proposed rule outlined the three specific categories of management activities that will be considered as a contribution of active personal management and used in determining whether the person or member has made a significant contribution of active personal management. Although not explicitly stated, it must be understood that to be successful in farming, the timing of those management activities is critical and the failure to make a management decision or failing to take a management action, may make a difference in a farming operation remaining viable. So unless those specific management activities are timely completed by the person or member of a farming operation, the person or member will not only be considered to not meet the requirements to be determined actively engaged in farming, but also that such a failure of the person or member to timely perform the specified management activities would adversely affect the viability and continued existence of the farming operation itself. Therefore, we believe that the term critical is being used in the normal dictionary definition and an additional regulatory definition is not necessary.

Comment: Rather than 500 hours or at least 25 percent of the total management needed for the farming operation, the new measurable standard for management should be increased to 1,000 hours or 50 percent, equal to the existing labor contribution requirement.

Response: Various proposals and concepts were considered in the development of this rule, including a minimum level of interest a person must hold in a farming operation before the person could qualify as actively engaged in farming with only an active personal management contribution, a weighted ranking of critical activities performed, Internal Revenue Service tax code requirements for a person to be considered a material participant in a business to claim a percentage of profit or loss from the business for personal income tax purposes, ARMS data of average size farming operations, and a higher hourly threshold, such the current hourly standard for active personal labor. The 500 hour or 25 percent standard was chosen because the ARMS found that generally in a farming operation, at least twice the amount of hours is devoted to labor activities as compared to the performance of actual management activities. Therefore, we are not making a change in the regulation in response to this comment.

Comment: A numerical standard is not suitable to be applied at all to the performance of management activities.

Response: The Managers' Report on the 2014 Farm Bill specifically directed the Secretary in implementing Section 1604 to develop clear and objective standards that can easily be measured and accounted for by members of the farming operation. In the absence of a consensus on an alternative standard for measuring a management contribution, the numerical standard from the proposed rule was adopted in the final rule. A numerical standard meets the requirements for being clear and objective, as well as easily measured and accounted for. Therefore, we are not making a change in the regulation.

Comment: An equitable, measurable standard of significance should be one that combines both labor and management contributions due to the difficulty at times of deciding whether an activity or action is labor or management.

Response: We have revised the rule in response to this comment to address the issue of a combined significant contribution of management and labor for farming operations that are subject to the new Subpart G. The existing regulations in 1400.3(b)(4) specify how such a combined significant contribution can meet the requirements of actively engaged in farming for operations that are not subject to new subpart G, where the activity is primarily labor or primarily management. This rule specifies a new measurable standard for a significant contribution of the combination of active personal labor and active personal management to a farming operation that is subject to subpart G that takes into account the reality of most farming operations where a person or member contributes not just labor or just management, but contributes a combination of both.

The new standard for a contribution of the combination of active personal labor and active personal management balances these realities and establishes a minimum hourly requirement based

on the existing hourly standard for a significant contribution of active personal labor of 1,000 hours and the new hourly standard adopted for a significant contribution of active personal management of 500 hours. However, the threshold for a significant contribution of combined labor and management is based on the proportionate share of the person's or member's combined contribution of both labor and management activities performed. Accordingly, under a combination of labor and management, the labor contribution is counted towards the existing 1,000 hours threshold for labor, and the management contribution is counted towards the 500 hours threshold for management. Because the rule establishes a combined limit for the combination of both labor and management, the minimum contribution amounts for each component are less than their individual limits if such determination would be made based on their sole contribution of labor (1000 hours) or management (500 hours) alone and the contributions under the combination are weighted to the activity that is greatest.

There are 5 total hourly thresholds for a significant contribution of the combination of labor and management, based on a prorated combination of each type of contribution. For example, a combined contribution where the majority of the contribution is management is measured against a 550 total hour threshold that is weighted towards the 500 hour standard for management, whereas a combined contribution where the majority of the contribution is labor is measured against a 950 total hour threshold that is weighted toward the 1,000 hours required for a significant contribution of labor.

The following table specifies the hourly thresholds for the combined contribution of active personal labor and active personal management based on the proportionate share of both labor and management activities reported.

COMBINATION OF ACTIVE PERSONAL LABOR AND ACTIVE PERSONAL MANAGEMENT MINIMUM REQUIREMENT FOR A SIGNIFICANT CONTRIBUTION

[In hours]

Management contribution in hours	Labor contribution in hours	Meets the minimum threshold for significant contribution, in hours
475	75	550
450	100	550
425	225	650
400	250	650
375	375	750
350	400	750
325	425	750
300	550	850
275	575	850
250	600	850
225	625	850
200	650	850
175	675	850
150	800	950
125	825	950
100	850	950
75	875	950
50	900	950
25	925	950

Under these weighted thresholds, two contributions of the same total contributed number of hours could have a different result, as it will depend upon how many hours of such total contribution are management and how many are labor. For example, a total combined contribution of 650 hours consisting of 250 hours of management and 400 hours of labor would not qualify as a significant contribution, whereas a total combined contribution of 650 hours consisting of 400 hours of management and 250 hours of labor would qualify as a significant contribution.

This standard will apply to each person that a farming operation requests to qualify as actively engaged in farming by making a significant contribution of the combination of labor and management, rather than only a significant contribution of management.

This rule treats a combination of labor and management as a subset of the manager requirements. This new provision to clarify a combined significant contribution does not change the limit of three farm managers. As part of an entity seeking more than one payment limit for management, those farm managers qualifying because of a combination of labor and management are also covered by the new definition and recordkeeping requirements. In no case may more than three persons per farming operation qualify as actively engaged in farming based on a contribution of active personal management or a combination of labor and management activities.

Comment: Section 1604 of the 2014 Farm Bill prohibits FSA from making changes or revisions to any of the existing regulations other than for the contribution of active personal management.

Response: That is correct, and this rule does not change the measurable standard for the significant contribution of active personal labor, which remains at 1,000 hours or 50 percent of the labor required for the operation. The statute is clear and this rule changes the regulations only for a contribution of active personal management, including for a significant contribution of combined labor and management. The regulations that apply solely to a contribution of labor have not changed.

Restrictions on Active Personal Management Contributions

Comment: No restriction should be placed on the number of persons that a farming operation is allowed to qualify

as actively engaged in farming with the significant contribution of management and no labor.

Response: Section 1604 of the 2014 Farm Bill directs the Secretary to consider placing limits on the number of persons in a farming operation that may qualify as actively engaged in farming by only contributing management. Having no restriction would not address Section 1604. We considered various options while developing the proposed rule. As explained in the proposed rule, one option considered was a strict limit of one farm manager; however, we determined that it was reasonable to provide an option for a second and third farm manager in specific circumstances. The adoption of this restriction or limit addresses the 2014 Farm Bill provision while providing flexibility for large or complex operations. Therefore, no change to the rule is made in response to this comment.

Comment: There should be only one additional manager, period, the same as included in the House and Senate farm bills. The total payment limit for a farm should be decoupled from the number of managers by setting a strict limit of one manager.

Related comment: A non-family farm operation should not be allowed to exceed two eligible managers under any scenario.

Response: Consideration was given to allowing only one manager, or two managers, per non-family farming operation for all circumstances. However, the 2014 Farm Bill contained requirements that consideration be given to other factors such as operation size and operation complexity. The decision was made to allow up to a total of three managers, but only with documentation of the need for the additional managers, based on both operation size and complexity. Therefore, no change to the rule is made in response to these comments.

Comment: Restricting the number of managers completely negates the new definition of active personal management, and the removal of this restriction would provide flexibility for operations to adjust to the new management requirements and lessen the impact of implementation.

Response: The new limit of one farm manager with exceptions for up to three farm managers is flexible and recognizes that many diverse farming operations and farming practices are in existence today and may require multiple persons in farm management roles. Therefore, no change to the rule is made in response to this comment.

Comment: The standards for the allowance of additional managing members based in the operation's size and complexity are a recipe for abuse, permissiveness, and inconsistent application by COCs and STCs.

Response: All COC and STC recommendations for variances to the established standards for operation size and complexity, and all approvals of requests for additional managing members in a farming operation, are subject to approval and concurrence by DAFP before implementation. In addition, there will be no instances in which more than three farm managers per operation will be allowed by DAFP. Therefore, no change to the rule is made in response to this comment.

Comment: The new restriction of one contribution qualifies only one person or member in the farming operation is unreasonable because for liability or other purposes, a non-family manager may need to spread his or her management contributions over more than one entity or member to make all of them eligible for payment.

Response: In this rule, one person's contribution of active personal management or a combination of management and labor can only qualify only one person or one legal entity as actively engaged. Aside from the spousal provision for actively engaged in farming that allows one spouse's actions to be used to qualify the other spouse as actively engaged, we have no statutory authority to permit the contributions of one person to qualify additional persons and legal entities that represent multiple payment limitations in the same farming operation. Furthermore, without this restriction, the tracking and measurement of actual contributions of labor or management being made to a farming operation would be difficult, if not elusive, to determine to any measurable level or degree of risk. Therefore, we are not making a change in the regulation.

Recordkeeping Requirements

Comment: The requirement to keep a written log of the performance of management activities should be eliminated on the premise that such records would be overly burdensome to the members, disruptive to the workflow, and too expensive for an operation to maintain.

Response: With the implementation of a measurable standard for the contribution of active personal management in hours or percentage of total hours expended in the farming operation, a written record or log of the performance of management activities is required from all members. These records are essential to enable county and State FSA committees to determine whether or not a significant contribution of specific management activities was performed to at least the minimum level necessary to qualify as a significant contribution as defined. Furthermore, the implementation of a measurable standard is meaningless in the absence of actual documentation to verify that the minimum level of the standard established has been met by the person who represents as meeting the standard. The new recordkeeping requirements apply only to joint operations and legal entities comprised of non-family members that are seeking to qualify more than one farm manager. Therefore, we are not making a change in the regulation.

Comment: The 2014 Farm Bill had a provision that FSA develop and implement a plan to monitor compliance reviews to ensure producers' compliance to the provisions of part 1400. Why was that not specifically in the rule?

Response: This requirement was already met prior to the implementation of the 2014 Farm Bill. FSA implemented an automated tracking system to record compliance review results and to monitor completion of compliance reviews in 2012. Review results and progress on the completion of compliance reviews for the 2009 through 2013 program years are currently being tracked. The United States Government Accountability Office (GAO) used FSA's tracking system in completion of the most recent audit of payment eligibility and payment limitation provisions (GAO 13–781, ''Farm Programs: Changes Are Needed to Eligibility Requirements for Being Actively Involved in Farming,'' September 2013). The current regulations in 7 CFR 1400.2(h) already specify that compliance reviews of farming operations and corresponding documentation may be conducted at any time.

To address this comment and further clarify the compliance review process, this final rule adds a new provision to 7 CFR 1400.2 to specify that the Deputy Administrator will periodically monitor the status of completion of the assigned compliance reviews, and take any actions deemed appropriate to ensure the timely completion of the reviews for payment eligibility and payment limitation compliance purposes.

General Comments

Comment: This rule removes certain flexibilities to where many farm families will become less sustainable to the point

that they may lose their ability to participate in farm programs.

Response: It is unclear how limiting the number of persons who may qualify for payment based solely on management will in any way reduce the sustainability of family farms. Furthermore, family farming operations are exempt from this rule. Therefore, no change to the rule is made in response to this comment.

Comment: Farm policy must seriously address the aging farmer crisis and effective payment caps are one tool USDA has to address this issue.

Response: Payment limits have been in place since the 1970s, and are not changed with this rule. The eligibility requirements for the receipt of farm program payments have been made more restrictive with each successive legislation to date. FSA does not have authority to modify the current payment limitations below what is specified in the 2014 Farm Bill. We have outreach programs that target beginning farmers, and many of our programs have special provisions, such as fee waivers, to encourage beginning farmers.

Comment: Lax payment limits allow big farms to outbid beginning farmers for land and leases. Limit or restrict the issuance of program payments to new and small farm operators only.

Response: FSA does not have authority to implement such a restriction. However, the average Adjusted Gross Income (AGI) provisions first implemented under the Farm Security and Rural Investment Act of 2002 (Pub. L. 107–171, generally referred to as the 2002 Farm Bill) and that remain, as amended by subsequent legislation, do restrict the payment eligibility of recipients with incomes above the specified AGI levels. As specified in 7 CFR 1400, persons with an AGI above the limit are not eligible for payments or benefits under ARC and PLC, price support programs including MAL and LDP, the Conservation Reserve Program, the Noninsured Crop Disaster Assistance Program, most FSA disaster assistance programs, and some conservation programs operated by the Natural Resources Conservation Service. Therefore, no change to the rule is made in response to this comment.

Comment: Require any operation that reorganizes to qualify for the family farm exemption to wait 5 years following the effective date of this rule to qualify for the exemption.

Response: The 2014 Farm Bill does not authorize such a provision. The 2014 Farm Bill requires that this rule not apply to any farming operation comprised entirely of family members, and with no such waiting period. Therefore, no change to the rule is made in response to this comment.

Comment: FSA's failure to evaluate the effects of this proposal on the environment would violate the National Environmental Policy Act (NEPA, 42 U.S.C. 4321–4347), current FSA regulations, and would be arbitrary, capricious, an abuse of discretion, and contrary to the law under the Administrative Procedure Act (5 U.S.C. 553).

Response: FSA has evaluated the effects of this proposal and determined that this final rule does not constitute a major Federal action that would significantly affect the quality of the human environment, individually or cumulatively. Therefore, FSA will not prepare an environmental assessment or environmental impact statement for this regulatory action.

Effective Date

The Administrative Procedure Act (5 U.S.C. 553) provides generally that before rules are issued by Government agencies, the rule is required to be published in the **Federal Register**, and the required publication of a substantive rule is to be not less than 30 days before its effective date. One of the exceptions is when the agency finds good cause for not delaying the effective date. Subsection 1601(c)(2) of the 2014 Farm Bill makes this final rule exempt from notice and comment. Therefore, using the administrative procedure provisions in 5 U.S.C. 553, FSA finds that there is good cause for making this rule effective less than 30 days after publication in the **Federal Register**. This rule allows FSA to make the changes to the actively engaged regulations in time for the new 2016 program year. Therefore, this final rule is effective when published in the **Federal Register**.

Executive Orders 12866 and 13563

Executive Order 12866, ''Regulatory Planning and Review,'' and Executive Order 13563, ''Improving Regulation and Regulatory Review,'' direct agencies to assess all costs and benefits of available regulatory alternatives and, if regulation is necessary, to select regulatory approaches that maximize net benefits (including potential economic, environmental, public health and safety effects, distributive impacts, and equity). Executive Order 13563 emphasizes the importance of quantifying both costs and benefits, of reducing costs, of harmonizing rules, and of promoting flexibility.

The Office of Management and Budget (OMB) designated this rule as significant under Executive Order 12866, ''Regulatory Planning and Review,'' and therefore, OMB has reviewed this rule. The costs and benefits of this final rule are summarized below. The full cost benefit analysis is available on regulations.gov.

Summary of Economic Impacts

About 3,200 joint operations could lose eligibility for around $106 million in total crop year 2016 to 2018 benefits from the PLC, ARC, and MAL Programs. The largest savings, around $38 million, are projected for both the 2016 and 2017 crops (note that the exemption for operations with fall plantings ends with the 2016 crops). Savings are projected to decline to around $29 million for the 2018 crop if prices improve, and in that case, producers would be eligible for lower benefits from the MAL, LDP, ARC, and PLC Programs, independent of the requirements of this rule. These savings can also be viewed as a cost of this rule for producers. This rule does not change the payment limit per person, which is a joint $125,000 for the applicable programs. As specified in the current regulations, the payment limits apply to general partnerships and joint ventures (collectively referred to as joint operations) based on the number of eligible partners in the joint operation; each partner may qualify the joint operation for a payment of up to $125,000. In other words, each person in the joint operation who loses eligibility due to this rule will lose eligibility for up to $125,000 in payments for the joint operation.

Other types of entities (such as corporations and limited liability companies) that share a single payment limit of $125,000, regardless of their number of owners, would not have their payments reduced by this rule. Each owner must contribute management or labor to the operation to qualify the operation to receive the member's share of the single payment limit.

No entities comprised solely of family members will be impacted by this rule.

If commodity prices are sufficiently high that few producers are eligible for any benefits, the costs of this rule to producers (and savings to USDA) would be less, possibly even zero. That is, if very few joint operations were to earn farm program payments due to high commodity prices, limiting eligibility on the basis of management contributions would not have much impact. Government costs for implementing this rule are expected to be minimal ($0.4 million). The applicable joint operations' opportunity costs associated with keeping management logs over the course of each year are expected to be about $7 million, but that amount could

decline over time as managers standardize their recordkeeping.

Regulatory Flexibility Act

The Regulatory Flexibility Act (5 U.S.C. 601–612), as amended by the Small Business Regulatory Enforcement Fairness Act of 1996 (SBREFA), generally requires an agency to prepare a regulatory analysis of any rule whenever an agency is required by APA or any other law to publish a rule, unless the agency certifies that the rule will not have a significant economic impact on a substantial number of small entities. This final rule will not have a significant impact on a substantial number of small entities. The farming operations of small entities generally do not have multiple members that contribute only active personal management to meet the requirements of actively engaged in farming.

Environmental Review

The environmental impacts of this final rule have been considered in a manner consistent with the provisions of NEPA, the regulations of the Council on Environmental Quality (40 CFR parts 1500–1508), and the FSA regulations for compliance with NEPA (7 CFR part 799). The Agricultural Act of 2014 (the 2014 Farm Bill) requires that USDA publish a regulation to specifically define a ''significant contribution of active personal management'' for the purposes of determining payment eligibility. This regulation clarifies the activities that qualify as active personal management and the recordkeeping requirements to document eligible management activities. This rule is making a mandatory administrative clarification. As such, FSA has determined that this final rule does not constitute a major Federal action that would significantly affect the quality of the human environment, individually or cumulatively. Therefore, FSA will not prepare an environmental assessment or environmental impact statement for this regulatory action.

Executive Order 12372

Executive Order 12372, ''Intergovernmental Review of Federal Programs,'' requires consultation with State and local officials that would be directly affected by proposed Federal financial assistance. The objectives of the Executive Order are to foster an intergovernmental partnership and a strengthened Federalism, by relying on State and local processes for State and local government coordination and review of proposed Federal financial assistance and direct Federal development. For reasons specified in the final rule related notice regarding 7 CFR part 3015, subpart V (48 FR 29115, June 24, 1983), the programs and activities in this rule are excluded from the scope of Executive Order 12372.

Executive Order 12988

This final rule has been reviewed under Executive Order 12988, ''Civil Justice Reform.'' This rule will not preempt State or local laws, regulations, or policies unless they represent an irreconcilable conflict with this rule. This rule will not have retroactive effect. Before any judicial actions may be brought regarding the provisions of this rule, the administrative appeal provisions of 7 CFR parts 11 and 780 are to be exhausted.

Executive Order 13132

This final rule has been reviewed under Executive Order 13132, ''Federalism.'' The policies contained in this rule would not have any substantial direct effect on States, on the relationship between the Federal government and the States, or on the distribution of power and responsibilities among the various levels of government, except as required by law. Nor would this rule impose substantial direct compliance costs on State and local governments. Therefore consultation with the States is not required.

Executive Order 13175

This final rule has been reviewed in accordance with the requirements of Executive Order 13175, ''Consultation and Coordination with Indian Tribal Governments.'' Executive Order 13175 requires Federal agencies to consult and coordinate with tribes on a government-to-government basis on policies that have tribal implications, including regulations, legislative comments or proposed legislation, and other policy statements or actions that have substantial direct effects on one or more Indian tribes, on the relationship between the Federal Government and Indian tribes or on the distribution of power and responsibilities between the Federal Government and Indian tribes.

FSA has assessed the impact of this final rule on Indian tribes and determined that this rule would not, to our knowledge, have tribal implications that require tribal consultation under Executive Order 13175. If a Tribe requests consultation, FSA will work with the USDA Office of Tribal Relations to ensure meaningful consultation is provided where changes, additions, and modifications identified in this rule are not expressly mandated by the 2014 Farm Bill.

Unfunded Mandates

Title II of the Unfunded Mandates Reform Act of 1995 (UMRA, Pub. L. 104–4) requires Federal agencies to assess the effects of their regulatory actions on State, local, and Tribal governments or the private sector. Agencies generally must prepare a written statement, including cost benefits analysis, for proposed and final rules with Federal mandates that may result in expenditures of $100 million or more in any 1 year for State, local or Tribal governments, in the aggregate, or to the private sector. UMRA generally requires agencies to consider alternatives and adopt the more cost effective or least burdensome alternative that achieves the objectives of the rule. This final rule contains no Federal mandates, as defined in Title II of UMRA, for State, local and Tribal governments or the private sector. Therefore, this rule is not subject to the requirements of sections 202 and 205 of UMRA.

Federal Domestic Assistance Programs

The title and number of the programs in the Catalog of Federal Domestic Assistance to which this rules applies are: 10.051 Commodity Loans and Loan Deficiency Payments; 10.112 Price Loss Coverage; and 10.113 Agriculture Risk Coverage.

Paperwork Reduction Act

The regulations in this final rule are exempt from requirements of the Paperwork Reduction Act (44 U.S.C. Chapter 35), as specified in Section 1601(c)(2)(B) of the 2014 Farm Bill, which provides that these regulations be promulgated and administered without regard to the Paperwork Reduction Act. Section 1604 of the Farm Bill requires us to ensure that any additional paperwork required by this rule be limited only to persons who are subject to this rule. The additional recording and recordkeeping requirements of this final rule will only apply to persons who are claiming eligibility for payments based on a significant contribution of active personal management or a combination of labor and management to the farming operation.

E-Government Act Compliance

FSA is committed to complying with the E-Government Act, to promote the use of the Internet and other information technologies to provide increased opportunities for citizen access to Government information and services, and for other purposes.

List of Subjects in 7 CFR Part 1400

Agriculture, Loan programs-agriculture, Conservation, Price support programs.

For the reasons discussed above, CCC amends 7 CFR part 1400 as follows:

PART 1400—PAYMENT LIMITATION AND PAYMENT ELIGIBILITY

■ 1. The authority citation for part 1400 continues to read as follows:

Authority: 7 U.S.C. 1308, 1308–1, 1308–2, 1308–3, 1308–3a, 1308–4, and 1308–5.

§ 1400.1 [Amended]

■ 2. In § 1400.1(a)(8), remove the words ''C and D'' and add the words ''C, D, and G'' in their place.

■ 3. Amend § 1400.2 by adding paragraph (i) to read as follows:

§ 1400.2 Administration

* * * * *

(i) The Deputy Administrator will periodically monitor the status of completion of assigned compliance reviews and take any actions deemed appropriate to ensure timely completion of reviews for payment eligibility and payment limitation compliance purposes.

■ 4. Add subpart G to read as follows:

Subpart G—Additional Payment Eligibility Provisions for Joint Operations and Legal Entities Comprised of Non-Family Members or Partners, Stockholders, or Persons With an Ownership Interest in the Farming Operation

Sec.

Subpart G—Additional Payment Eligibility Provisions for Joint Operations and Legal Entities Comprised of Non-Family Members or Partners, Stockholders, or Persons With an Ownership Interest in the Farming Operation

§ 1400.600 Applicability.

(a) This subpart is applicable to all of the programs as specified in § 1400.1 and any other programs as specified in individual program regulations.

(b) The requirements of this subpart will apply to farming operations for FSA program payment eligibility and limitation purposes as specified in subparts B and C of this part.

(c) The requirements of this subpart do not apply to farming operations specified in paragraph (b) of this section if either:

(1) All persons who are partners, stockholders, or persons with an ownership interest in the farming operation or of any entity that is a member of the farming operation are family members as defined in § 1400.3; or

(2) The farming operation is seeking to qualify only one person as making a significant contribution of active personal management, or a significant contribution of the combination of active personal labor and active personal management, for the purposes of qualifying only one person or entity as actively engaged in farming.

§ 1400.601 Definitions.

(a) The terms defined in § 1400.3 are applicable to this subpart and all documents issued in accordance with this part, except as otherwise provided in this section.

(b) The following definitions are also applicable to this subpart:

Active personal management means personally providing and participating in management activities considered critical to the profitability of the farming operation and performed under one or more of the following categories:

(i) Capital, which includes:

(A) Arranging financing and managing capital;

(B) Acquiring equipment;

(C) Acquiring land and negotiating leases;

(D) Managing insurance; and

(E) Managing participation in USDA programs;

(ii) Labor, which includes hiring and managing of hired labor; and

(iii) Agronomics and marketing, which includes:

(A) Selecting crops and making planting decisions;

(B) Acquiring and purchasing crop inputs;

(C) Managing crops (that is, whatever managerial decisions are needed with respect to keeping the growing crops living and healthy—soil fertility and fertilization, weed control, insect control, irrigation if applicable) and making harvest decisions; and

(D) Pricing and marketing of crop production.

Significant contribution of active personal management means active personal management activities performed by a person, with a direct or indirect ownership interest in the farming operation, on a regular, continuous, and substantial basis to the farming operation, and meets at least one of the following to be considered significant:

(i) Performs at least 25 percent of the total management hours required for the farming operation on an annual basis; or

(ii) Performs at least 500 hours of management annually for the farming operation.

Significant contribution of the combination of active personal labor and active personal management means a contribution of a combination of active personal labor and active personal management that:

(i) Is critical to the profitability of the farming operation;

(ii) Is performed on a regular, continuous, and substantial basis; and

(iii) Meets the following required number of hours:

COMBINATION OF ACTIVE PERSONAL LABOR AND ACTIVE PERSONAL MANAGEMENT MINIMUM REQUIREMENT FOR A SIGNIFICANT CONTRIBUTION

[In hours]

Management contribution in hours	Labor contribution in hours	Meets the minimum threshold for significant contribution, in hours
475	75	550
450	100	550
425	225	650
400	250	650
375	375	750
350	400	750
325	425	750

COMBINATION OF ACTIVE PERSONAL LABOR AND ACTIVE PERSONAL MANAGEMENT MINIMUM REQUIREMENT FOR A SIGNIFICANT CONTRIBUTION—Continued

[In hours]

Management contribution in hours	Labor contribution in hours	Meets the minimum threshold for significant contribution, in hours
300	550	850
275	575	850
250	600	850
225	625	850
200	650	850
175	675	850
150	800	950
125	825	950
100	850	950
75	875	950
50	900	950
25	925	950

§ 1400.602 Restrictions on active personal management contributions.

(a) If a farming operation includes any nonfamily members as specified under the provisions of § 1400.201(b)(2) and (3) and the farming operation is seeking to qualify more than one person as providing a significant contribution of active personal management, or a significant contribution of the combination of active personal labor and active personal management, then:

(1) Each such person must maintain contemporaneous records or logs as specified in § 1400.603; and

(2) Subject to paragraph (b) of this section, if the farming operation seeks not more than one additional person to qualify as providing a significant contribution of active personal management, or a significant contribution of the combination of active personal labor and active personal management, because the operation is large, then the operation may qualify for one such additional person if the farming operation:

(i) Produces and markets crops on 2,500 acres or more of cropland;

(ii) Produces honey with more than 10,000 hives; or

(iii) Produces wool with more than 3,500 ewes; and

(3) If the farming operation seeks not more than one additional person to qualify as providing a significant contribution of active personal management, or a significant contribution of the combination of active personal labor and active personal management, because the operation is complex, then the operation may qualify for one such additional person if the farming operation is determined by the FSA state committee as complex after considering the factors described in paragraphs (a)(3)(i) and (ii) of this section. Any determination that a farming operation is complex by an FSA state committee must be reviewed and DAFP must concur with such determination for it to be implemented. To demonstrate complexity, the farming operation will be required to provide information to the FSA state committee on the following:

(i) Number and type of livestock, crops, or other agricultural products produced and marketing channels used; and

(ii) Geographical area covered.

(b) FSA state committees may adjust the limitations described in paragraph (a)(2) of this section up or down by not more than 15 percent if the FSA state committee determines that the relative size of farming operations in the state justify making a modification of either or both of these limitations. If the FSA state committee seeks to make a larger adjustment, then DAFP will review and may approve such request.

(c) If a farming operation seeks to qualify a total of three persons as providing a significant contribution of active personal management, or a significant contribution of the combination of active personal labor and active personal management, then the farming operation must demonstrate both size and complexity as specified in paragraph (a) of this section.

(d) In no case may more than three persons in the same farming operation qualify as providing a significant contribution of active personal management, or a significant contribution of the combination of active personal labor and active personal management, as defined by this subpart.

(e) A person's contribution of active personal management, or the contribution of the combination of active personal labor and active personal management, to a farming operation specified in § 1400.601(b) will only qualify one member of that farming operation as actively engaged in farming as defined in this part. Other individual persons in the same farming operation are not precluded from making management contributions, except that such contributions will not be recognized as meeting the requirements of being a significant contribution of active personal management.

§ 1400.603 Recordkeeping requirements.

(a) Any farming operation requesting that more than one person qualify as making a significant contribution of active personal management, or a significant contribution of the combination of active personal labor and active personal management, must maintain contemporaneous records or activity logs for all persons that make any contribution of any management to a farming operation under this subpart that must include, but are not limited to, the following:

(1) Location where the management activity was performed; and

(2) Time expended and duration of the management activity performed.

(b) To qualify as providing a significant contribution of active personal management each person covered by this subpart must:

(1) Maintain these records and supporting business documentation; and

(2) If requested, timely make these records available for review by the appropriate FSA reviewing authority.

(c) If a person fails to meet the requirement of paragraphs (a) and (b) of this section, then both of the following will apply:

(1) The person's contribution of active personal management as represented to the farming operation for payment

eligibility purposes will be disregarded; and

(2) The person's payment eligibility will be re-determined for the applicable program year.

Val Dolcini,

Executive Vice President, Commodity Credit Corporation, and Administrator, Farm Service Agency.

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BILLING CODE 3410–05–P

DEPARTMENT OF STATE

22 CFR Part 121

[Public Notice: 9378]

RIN 1400–AD74

Temporary Modification of Category XI of the United States Munitions List

AGENCY: Department of State.

ACTION: Final rule; notice of temporary modification.

SUMMARY: The Department of State, pursuant to its regulations and in the interest of the security of the United States, temporarily modifies Category XI of the United States Munitions List (USML).

DATES: Amendatory instructions 1 and 2 are effective December 29, 2015. Amendatory instruction No. 3 is effective August 30, 2017.

FOR FURTHER INFORMATION CONTACT: Mr. C. Edward Peartree, Director, Office of Defense Trade Controls Policy, Department of State, telephone (202) 663–2792; email *DDTCResponseTeam@state.gov.* ATTN: Temporary Modification of Category XI.

SUPPLEMENTARY INFORMATION: On July 1, 2014, the Department published a final rule revising Category XI of the USML, 79 FR 37536, effective December 30, 2014. This final rule, consistent with the two prior proposed rules for USML Category XI (78 FR 45018, July 25, 2013 and 77 FR 70958, November 28, 2012), revised paragraph (b) of Category XI to clarify the extent of control and maintain the existing scope of control on items described in paragraph (b) and the directly related software described in paragraph (d). The Department has determined that exporters may read the revised control language to exclude certain intelligence analytics software that has been and remains controlled on the USML. Therefore, the Deputy Assistant Secretary of State for Defense Trade Controls determined that it is in the interest of the security of the United States to temporarily revise USML Category XI paragraph (b), pursuant to the provisions of 22 CFR 126.2, while a long term solution is developed. The Department will publish any permanent revision to USML Category XI paragraph (b) addressing this issue as a proposed rule for public comment.

This temporary revision clarifies that the scope of control in existence prior to December 30, 2014 for USML paragraph (b) and directly related software in paragraph (d) remains in effect. This clarification is achieved by reinserting the words ''analyze and produce information from'' and by adding software to the description of items controlled.

The Department previously published a final rule on July 2, 2015 (80 FR 37974) that temporarily modified USML Category XI(b) until December 29, 2015. This rule will extend the July 2, 2015 modification to allow the U.S. government to consider the controls in USML Category XI(b). Due to the current status of the review an extension until August 30, 2017 is appropriate.

Regulatory Findings

Administrative Procedure Act

The Department is publishing this rule as a final rule based upon good cause, and its determination that delaying the effect of this rule during a period of public comment would be impractical, unnecessary and contrary to public interest. 5 U.S.C. 553(b)(3)(B). In addition, the Department is of the opinion that controlling the import and export of defense articles and services is a foreign affairs function of the United States Government and that rules implementing this function are exempt from sections 553 (rulemaking) and 554 (adjudications) of the Administrative Procedure Act (APA).

Regulatory Flexibility Act

Since the Department is of the opinion that this rule is exempt from the provisions of 5 U.S.C. 553, there is no requirement for an analysis under the Regulatory Flexibility Act.

Unfunded Mandates Reform Act of 1995

This rulemaking does not involve a mandate that will result in the expenditure by State, local, and tribal governments, in the aggregate, or by the private sector, of $100 million or more in any year and it will not significantly or uniquely affect small governments. Therefore, no actions were deemed necessary under the provisions of the Unfunded Mandates Reform Act of 1995.

Small Business Regulatory Enforcement Fairness Act of 1996

The Department does not believe this rulemaking is a major rule under the criteria of 5 U.S.C. 804.

Executive Orders 12372 and 13132

This rulemaking does not have sufficient federalism implications to require consultations or warrant the preparation of a federalism summary impact statement. The regulations implementing Executive Order 12372 regarding intergovernmental consultation on Federal programs and activities do not apply to this rulemaking.

Executive Orders 12866 and 13563

The Department believes that benefits of the rulemaking outweigh any costs, which are estimated to be insignificant. It is the Department's position that this rulemaking is not a significant rule under the criteria of Executive Order 12866, and is consistent with the provisions of Executive Order 13563.

Executive Order 12988

The Department of State has reviewed this rulemaking in light of sections 3(a) and 3(b)(2) of Executive Order 12988 to eliminate ambiguity, minimize litigation, establish clear legal standards, and reduce burden.

Executive Order 13175

The Department of State has determined that this rulemaking will not have tribal implications, will not impose substantial direct compliance costs on Indian tribal governments, and will not preempt tribal law. Accordingly, the requirements of Executive Order 13175 do not apply to this rulemaking.

Paperwork Reduction Act

This rulemaking does not impose or revise any information collections subject to 44 U.S.C. Chapter 35.

List of Subjects in 22 CFR Part 121

Arms and munitions, Classified information, Exports.

For reasons stated in the preamble, the State Department amends 22 CFR part 121 as follows:

PART 121—THE UNITED STATES MUNITIONS LIST

■ 1. The authority citation for part 121 continues to read as follows:

Authority: Secs. 2, 38, and 71, Pub. L. 90–629, 90 Stat. 744 (22 U.S.C. 2752, 2778, 2797); 22 U.S.C. 2651a; Pub. L. 105–261, 112 Stat. 1920; Section 1261, Pub. L. 112–239; E.O. 13637, 78 FR 16129.

■ 2. In § 121.1, under Category XI, revise paragraph (b), effective December 29, 2015 to read as follows:

§ 121.1 The United States Munitions List.

* * * * *

Category XI—Military Electronics

* * * * *

*(b) Electronic systems, equipment or software, not elsewhere enumerated in this sub-chapter, specially designed for intelligence purposes that collect, survey, monitor, or exploit, or analyze and produce information from, the electromagnetic spectrum (regardless of transmission medium), or for counteracting such activities.

* * * * *

■ 3. In § 121.1, under Category XI, revise paragraph (b), effective August 30, 2017, to read as follows:

§ 121.1 The United States Munitions List.

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Category XI—Military Electronics

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*(b) Electronic systems or equipment, not elsewhere enumerated in this sub-chapter, specially designed for intelligence purposes that collect, survey, monitor, or exploit the electromagnetic spectrum (regardless of transmission medium), or for counteracting such activities.

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Brian H. Nilsson,

Deputy Assistant Secretary for Defense Trade Controls, Bureau of Political-Military Affairs, U.S. Department of State.

[FR Doc. 2015–31528 Filed 12–15–15; 8:45 am]

BILLING CODE 4710–25–P

DEPARTMENT OF THE TREASURY

31 CFR Part 33

DEPARTMENT OF HEALTH AND HUMAN SERVICES

45 CFR Part 155

[CMS–9936–N]

Waivers for State Innovation

AGENCY: Centers for Medicare & Medicaid Services (CMS), HHS; Department of the Treasury.

ACTION: Guidance.

SUMMARY: This guidance relates to Section 1332 of the Patient Protection and Affordable Care Act (ACA) and its implementing regulations. Section 1332 provides the Secretary of Health and Human Services and the Secretary of the Treasury with the discretion to approve a state's proposal to waive specific provisions of the ACA (a State Innovation Waiver), provided the proposal meets certain requirements. In particular, the Secretaries can only exercise their discretion to approve a waiver if they find that the waiver would provide coverage to a comparable number of residents of the state as would be provided coverage absent the waiver, would provide coverage that is at least as comprehensive and affordable as would be provided absent the waiver, and would not increase the Federal deficit. If the waiver is approved, the state may receive funding equal to the amount of forgone Federal financial assistance that would have been provided to its residents pursuant to specified ACA programs, known as pass-through funding. State Innovation Waivers are available for effective dates beginning on or after January 1, 2017. They may be approved for periods up to 5 years and can be renewed. The Departments promulgated implementing regulations in 2012. This document provides additional information about the requirements that must be met, the Secretaries' application review procedures, the amount of pass-through funding, certain analytical requirements, and operational considerations.

DATES: *Comment Date:* Comments may be submitted at any time.

ADDRESSES: In commenting, please refer to file code CMS–9936–N. Because of staff and resource limitations, we cannot accept comments by facsimile (FAX) transmission.

You may submit comments in one of four ways (please choose only one of the ways listed):

1. *Electronically.* You may submit electronic comments on this document to *http://www.regulations.gov.* Follow the ''Submit a comment'' instructions.

2. *By regular mail.* You may mail written comments to the following address ONLY: Centers for Medicare & Medicaid Services, Department of Health and Human Services, Attention: CMS–9936–N, P.O. Box 8016, Baltimore, MD 21244–8016.

3. *By express or overnight mail.* You may send written comments to the following address ONLY: Centers for Medicare & Medicaid Services, Department of Health and Human Services, Attention: CMS–9936–N, Mail Stop C4–26–05, 7500 Security Boulevard, Baltimore, MD 21244–1850.

4. *By hand or courier.* Alternatively, you may deliver (by hand or courier) your written comments ONLY to the following addresses:

a. For delivery in Washington, DC—Centers for Medicare & Medicaid Services, Department of Health and Human Services, Room 445–G, Hubert H. Humphrey Building, 200 Independence Avenue SW., Washington, DC 20201.

(Because access to the interior of the Hubert H. Humphrey Building is not readily available to persons without Federal government identification, commenters are encouraged to leave their comments in the CMS drop slots located in the main lobby of the building. A stamp-in clock is available for persons wishing to retain a proof of filing by stamping in and retaining an extra copy of the comments being filed.)

b. For delivery in Baltimore, MD—Centers for Medicare & Medicaid Services, Department of Health and Human Services, 7500 Security Boulevard, Baltimore, MD 21244–1850.

If you intend to deliver your comments to the Baltimore address, call telephone number (410) 786–9994 in advance to schedule your arrival with one of our staff members. Comments erroneously mailed to the addresses indicated as appropriate for hand or courier delivery may be delayed.

For information on viewing public comments, see the beginning of the **SUPPLEMENTARY INFORMATION** section.

FOR FURTHER INFORMATION CONTACT: Centers for Medicare & Medicaid Services: Tricia Beckmann, 301–492–4328, or Robert Yates, 301–492–5151.

SUPPLEMENTARY INFORMATION: Inspection of Public Comments: All comments received are available for viewing by the public, including any personally identifiable or confidential business information that is included in a comment. We post all comments received on the following Web site as soon as possible after they have been received: *http://www.regulations.gov.* Follow the search instructions on that Web site to view public comments.

Comments received will also be available for public inspection as they are received, generally beginning approximately 3 weeks after publication of a document, at the headquarters of the Centers for Medicare & Medicaid Services, 7500 Security Boulevard, Baltimore, Maryland 21244, Monday through Friday of each week from 8:30 a.m. to 4 p.m. To schedule an appointment to view public comments, phone 1–800–743–3951.

I. Statutory Requirements

Under Section 1332 of the Affordable Care Act (ACA), the Secretaries of Health and Human Services (HHS) and the Treasury as appropriate may

exercise their discretion to approve a request for a State Innovation Waiver only if the Secretaries determine that the proposal meets the following four requirements: (1) The proposal will provide coverage to at least a comparable number of the state's residents as would be provided absent the waiver; (2) the proposal will provide coverage and cost-sharing protections against excessive out-of-pocket spending that are at least as affordable for the state's residents as would be provided absent the waiver; (3) the proposal will provide coverage that is at least as comprehensive for the state's residents as would be provided absent the waiver; and, (4) the proposal will not increase the Federal deficit. The Secretaries retain their discretionary authority under Section 1332 to deny waivers when appropriate given consideration of the application as whole, including the four requirements. As under similar waiver authorities, the Secretaries reserve the right to suspend or terminate a waiver, in whole or in part, any time before the date of expiration, if the Secretaries determine that the state materially failed to comply with the terms and conditions of the waiver, including any of the requirements discussed in this guidance.

Final regulations at 31 CFR part 33 and 45 CFR part 155, subpart N require a state to provide actuarial analyses and actuarial certifications, economic analyses, data and assumptions, targets, an implementation timeline, and other necessary information to support the state's estimates that the proposed waiver will comply with these requirements.[1]

A. Coverage

To meet the coverage requirement, a comparable number of state residents must be forecast to have coverage under the waiver as would have coverage absent the waiver.

Coverage refers to minimum essential coverage (or, if the individual shared responsibility provision is waived under a State Innovation Waiver, to something that would qualify as minimum essential coverage but for the waiver). For this purpose, ''comparable'' means that the forecast of the number of covered individuals is no less than the forecast of the number of covered individuals absent the waiver. This condition generally must be forecast to be met in each year that the waiver would be in effect.

The impact on all state residents is considered, regardless of the type of coverage they would have absent the waiver. (For example, while a State Innovation Waiver may not change the terms of a state's Medicaid coverage or change existing Medicaid demonstration authority, changes in Medicaid enrollment that result from a State Innovation Waiver, holding the state's Medicaid policies constant, are considered in evaluating the number of residents with coverage under a waiver.)

Assessment of whether the proposal covers a comparable number of individuals also takes into account the effects across different groups of state residents, and, in particular, vulnerable residents, including low-income individuals, elderly individuals, and those with serious health issues or who have a greater risk of developing serious health issues. Reducing coverage for these types of vulnerable groups would cause a waiver application to fail this requirement, even if the waiver would provide coverage to a comparable number of residents overall. Finally, analysis under the coverage requirement takes into account whether the proposal sufficiently prevents gaps in or discontinuations of coverage.

As provided in 31 CFR part 33 and 45 CFR part 155, subpart N, the waiver application must include analysis and supporting data that establishes that the waiver satisfies this requirement, including information on the number of individuals covered by income, health status, and age groups, under current law and under the waiver, including year-by-year estimates. The application should identify any types of individuals who are less likely to be covered under the waiver than under current law.

The state should also provide a description of the model used to produce these estimates, including data sources and quality, key assumptions, and parameters. The state may be required to provide micro data and other information to inform the Secretaries' analysis.

B. Affordability

To meet the affordability requirement, health care coverage under the waiver must be forecast to be as affordable overall for state residents as coverage absent the waiver.

Affordability refers to state residents' ability to pay for health care and may generally be measured by comparing residents' net out-of-pocket spending for health coverage and services to their incomes. Out-of-pocket expenses include both premium contributions (or equivalent costs for enrolling in coverage), and any cost sharing, such as deductibles, co-pays, and co-insurance, associated with the coverage. Spending on health care services that are not covered by a plan may also be taken into account if they are affected by the waiver proposal. The impact on all state residents is considered, regardless of the type of coverage they would have absent the waiver. This condition generally must be forecast to be met in each year that the waiver would be in effect.

Waivers are evaluated not only based on how they affect affordability on average, but also on how they affect the number of individuals with large health care spending burdens relative to their incomes. Increasing the number of state residents with large health care spending burdens would cause a waiver to fail the affordability requirement, even if the waiver would increase affordability for many other state residents. Assessment of whether the proposal meets the affordability requirement also takes into account the effects across different groups of state residents, and, in particular, vulnerable residents, including low-income individuals, elderly individuals, and those with serious health issues or who have a greater risk of developing serious health issues. Reducing affordability for these types of vulnerable groups would cause a waiver to fail this requirement, even if the waiver maintained affordability in the aggregate.

In addition, a waiver would fail the affordability requirement if it would reduce the number of individuals with coverage that provides a minimal level of protection against excessive cost sharing. In particular, waivers that reduce the number of people with insurance coverage that provides both an actuarial value equal to or greater than 60 percent and an out-of-pocket maximum that complies with section 1302(c)(1) of the ACA, would fail this requirement. So too would waivers that reduce the number of people with coverage that meets the affordability requirements set forth in sections 1916 and 1916A of the Social Security Act, as codified in 42 CFR part 447, subpart A, while holding the state's Medicaid policies constant.

As provided in 31 CFR part 33 and 45 CFR part 155, subpart N, the waiver application must include analysis and supporting data that establishes that the waiver satisfies this requirement. This includes information on estimated individual out-of-pocket costs by income, health status, and age groups, absent the waiver and with the waiver. The expected changes in premium contributions and other out-of-pocket

[1] ''Application, Review, and Reporting Process for Waivers for State Innovation Final Rule.'' February 27, 2012. Available at: *http://www.gpo.gov/fdsys/pkg/FR-2012-02-27/pdf/2012-4395.pdf.*

costs and the combined impact of changes in these components should be identified separately. The application should also describe any changes in employer contributions to health coverage or in wages expected under the waiver. The application should identify any types of individuals for whom affordability of coverage would be reduced by the waiver.

The state should also provide a description of the model used to produce these estimates, including data sources and quality, key assumptions, and parameters. The state may be required to provide micro data and other information to inform the Secretaries' analysis.

C. Comprehensiveness

To meet the comprehensiveness requirement, health care coverage under the waiver must be forecast to be at least as comprehensive overall for residents of the state as coverage absent the waiver.

Comprehensiveness refers to the scope of benefits provided by the coverage as measured by the extent to which coverage meets the requirements for essential health benefits (EHBs) as defined in section 1302(b) of the ACA, or, as appropriate, Medicaid and/or CHIP standards. The impact on all state residents is considered, regardless of the type of coverage they would have absent the waiver.

Comprehensiveness is evaluated by comparing coverage under the waiver to the state's EHB benchmark, selected by the state (or if the state does not select a benchmark, the default base-benchmark plan) pursuant to 45 CFR 156.100, as well as to, in certain cases, the coverage provided under the state's Medicaid and/or CHIP programs. A waiver cannot satisfy the comprehensiveness requirement if the waiver decreases: (1) The number of residents with coverage that is at least as comprehensive as the benchmark in all ten EHB categories; (2) for any of the ten EHB categories, the number of residents with coverage that is at least as comprehensive as the benchmark in that category; or (3) the number of residents whose coverage includes the full set of services that would be covered under the state's Medicaid and/or CHIP programs, holding the state's Medicaid and CHIP policies constant. That is, the waiver must not decrease the number of individuals with coverage that satisfies EHB requirements, the number of individuals with coverage of any particular category of EHB, or the number of individuals with coverage that includes the services covered under the state's Medicaid and/or CHIP programs.

Assessment of whether the proposal meets the comprehensiveness requirement also takes into account the effects across different groups of state residents, and, in particular, vulnerable residents, including low-income individuals, elderly individuals, and those with serious health issues or who have a greater risk of developing serious health issues. A waiver would fail the comprehensiveness requirement if it would reduce the comprehensiveness of coverage provided to these types of vulnerable groups, even if the waiver maintained comprehensiveness in the aggregate. This condition generally must be forecast to be met in each year that the waiver would be in effect.

As provided in the final regulations at 31 CFR part 33 and 45 CFR part 155, subpart N, the waiver application must include analysis and supporting data that establishes that the waiver satisfies this requirement. This includes an explanation of how the benefits offered under the waiver differ from the benefits provided absent the waiver (if the benefits differ at all) and how the state determined the benefits to be as comprehensive.

The state should also provide a description of the model used to produce these estimates, including data sources and quality, key assumptions, and parameters. The state may be required to provide micro data and other information to inform the Secretaries' analysis.

D. Deficit Neutrality

Under the deficit neutrality requirement, the projected Federal spending net of Federal revenues under the State Innovation Waiver must be equal to or lower than projected Federal spending net of Federal revenues in the absence of the waiver.

The estimated effect on Federal revenue includes all changes in income, payroll, or excise tax revenue, as well as any other forms of revenue (including user fees), that would result from the proposed waiver. Estimated effects would include, for example, changes in: The premium tax credit and health coverage tax credit, individual shared responsibility payments, employer shared responsibility payments, the excise tax on high-cost employer-sponsored plans, the credit for small businesses offering health insurance, and changes in income and payroll taxes resulting from changes in tax exclusions for employer-sponsored insurance and in deductions for medical expenses.

The effect on Federal spending includes all changes in Exchange financial assistance and other direct spending, such as changes in Medicaid spending (while holding the state's Medicaid policies constant) that result from the changes made through the State Innovation Waiver. Projected Federal spending under the waiver proposal also includes all administrative costs to the Federal government, including any changes in Internal Revenue Service administrative costs, Federal Exchange administrative costs, or other administrative costs associated with the waiver.

Waivers must not increase the Federal deficit over the period of the waiver (which may not exceed 5 years unless renewed) or in total over the ten-year budget plan submitted by the state as part of the State Innovation Waiver application. The ten-year budget plan must describe for both the period of the waiver and for the ten-year budget the projected Federal spending net of Federal revenues under the State Innovation Waiver and the projected Federal spending net of Federal revenues in the absence of the waiver.

The ten-year budget plan should assume the waiver would continue permanently, but should not include Federal spending or savings attributable to any period outside of the ten-year budget window. A variety of factors, including the likelihood and accuracy of projected spending and revenue effects and the timing of these effects, are considered when evaluating the effect of the waiver on the Federal deficit. A waiver that increases the deficit in any given year is less likely to meet the deficit neutrality requirement.

The state should also provide a description of the model used to produce these estimates, including data sources and quality, key assumptions, and parameters. The state may be required to provide micro data and other information to inform the Secretaries' analysis.

As provided in 31 CFR part 33 and 45 CFR part 155, subpart N, a state must submit evidence to demonstrate deficit neutrality, including a description of the analysis used to produce its estimate of the impact of the waiver on the Federal deficit. The description must include detailed information about the model, data sources and quality, key assumptions, and parameters. The state may be required to provide micro data and other information to support actuarial and economic analyses, so that the Secretaries can independently verify that the waiver meets the deficit neutrality requirement.

II. Impact of Other Program Changes on Assessment of a Waiver Proposal

The assessment of whether a State Innovation Waiver proposal satisfies the statutory criteria set forth in Section 1332 takes into consideration the impact of changes to ACA provisions made pursuant to the State Innovation Waiver. The assessment also considers related changes to the state's health care system that, under state law, are contingent only on the approval of the State Innovation Waiver. For example, the assessment would take into account the impact of a new state-run health benefits program that, under legislation enacted by the state, would be implemented if the State Innovation Waiver were approved.

The assessment does not consider the impact of policy changes that are contingent on further state action, such as state legislation that is proposed but not yet enacted. It also does not include the impact of changes contingent on other Federal determinations, including approval of Federal waivers pursuant to statutory provisions other than Section 1332. Therefore, the assessment would not take into account changes to Medicaid or CHIP that require separate Federal approval, such as changes in coverage or Federal Medicaid or CHIP spending that would result from a proposed Section 1115 demonstration, regardless of whether the Section 1115 demonstration proposal is submitted as part of a coordinated waiver application with a State Innovation Waiver. Savings accrued under either proposed or current Section 1115 Medicaid or CHIP demonstrations are not factored into the assessment of whether a proposed State Innovation Waiver meets the deficit neutrality requirement. The assessment also does not take into account any changes to the Medicaid or CHIP state plan that are subject to Federal approval.

The assessment does take into account changes in Medicaid and/or CHIP coverage or in Federal spending on Medicaid and/or CHIP that would result directly from the proposed waiver of provisions pursuant to Section 1332, holding state Medicaid and CHIP policies constant.

As the Departments receive and review waiver proposals, we will continue to examine the types of changes that will be considered in assessing State Innovation Waivers.

Nothing in this guidance alters a state's authority to make changes to its Medicaid and CHIP policies consistent with applicable law. This guidance does not alter the Secretary of Health and Human Services' authority or CMS' policy regarding review and approval of Section 1115 demonstrations, and states should continue to work with CMS' Center for Medicaid and CHIP Services on issues relating to Section 1115 demonstrations. A state may submit a coordinated waiver application as provided in 31 CFR 33.102 and 45 CFR 155.1302; in such a case, each waiver will be evaluated independently according to applicable Federal laws.

III. Federal Pass-Through Funding

The amount of Federal pass-through funding equals the Secretaries' annual estimate of the Federal cost (including outlays and forgone revenue) for Exchange financial assistance provided pursuant to the ACA that would be claimed by participants in the Exchange in the state in the calendar year in the absence of the waiver, but will not be claimed as a result of the waiver. The calculation of the amount of pass-through funding does not account for any other changes in Federal spending or revenues as a result of the waiver, including Federal administrative expenses for making the payments (note, however that changes to Federal spending on administrative expenses is considered in determining whether a waiver proposal meets the deficit neutrality requirement). The estimates take into account experience in the relevant state and similar states. The amount is calculated annually.

The waiver application must provide analysis and supporting data to inform the estimate of the pass-through funding amount. For states that do not utilize a Federally-facilitated or state Partnership Exchange this includes information about enrollment, premiums, and Exchange financial assistance in the state's Exchange by age, income, and type of policy, and other information as may be required by the Secretaries.

For further information on the demographic and economic assumptions to be used in determining the pass-through amount, see Section IV below.

IV. Economic Assumptions and Methodological Guidelines

The determination of whether a waiver meets the requirements under Section 1332 and the calculation of the pass-through funding amount are made using generally accepted actuarial and economic analytic methods such as micro-simulation. The analysis relies on assumptions and methodologies that are similar to those used to produce the baseline and policy projections included in the most recent President's Budget (or Mid-Session Review), but adapted as appropriate to reflect state-specific conditions.

The analysis is based on state-specific estimates of the current level and distribution of population by the relevant economic and demographic characteristics, including income and source of health coverage. It generally uses Federal estimates of population growth, economic growth as published in the Analytical Perspectives volume released as part of the President's Budget (*https://www.whitehouse.gov/omb/budget/Analytical_Perspectives*) and health care cost growth (*https://www.cms.gov/Research-Statistics-Data-and-Systems/Statistics-Trends-and-Reports/NationalHealthExpendData/index.html?redirect=/NationalHealthExpendData/*.) to project the initial state variables through the ten-year Budget plan window. However, in limited circumstances where it is expected that a state will experience substantially different trends than the nation as a whole in the absence of a waiver, the Secretaries may determine that state-specific assumptions will be used.

Estimates of the effect of the waiver assume, in accordance with standard estimating conventions, that macroeconomic variables like population, output, and labor supply are not affected by the waiver. However, estimates take into account, as appropriate, other changes in the behavior of individuals, employers, and other relevant entities induced by the waiver, including employer decisions regarding what coverage (and other compensation) they offer and individual decisions regarding whether to take up coverage. The same state-specific and Federal data, assumptions, and model are used to calculate comprehensiveness, affordability, and coverage, and relevant state components of Federal taxes and spending under the waiver and under current law.

The analysis and information submitted by the state as part of the application must conform to these standards. The application must describe all modeling assumptions used, sources of state-specific data, and the rationale for any deviation from Federal forecasts. A state may be required to provide to the Secretaries copies of any data used for their waiver analyses that are not publicly available so that the Secretaries can independently verify the analysis produced by the state.

V. Operational Considerations

A. Federally-Facilitated Exchanges

The Centers for Medicare & Medicaid Services (CMS) operates the Federally-

facilitated Exchange (FFE) platform. Certain changes that affect FFE processes may make a waiver proposal not feasible to implement at this time. Until further guidance is issued, the Federal platform cannot accommodate different rules for different states. For example, waivers that would require changes to the calculation of Exchange financial assistance, non-standard enrollment period determinations, customized plan management review options, or changes to the design used to display plan options are generally not feasible at this time due to operational limitations. In addition, the Federal platform cannot accommodate changes to its plan management templates in the near term. States contemplating a waiver that requires such changes may consider establishing their own platform administered by the state.

As noted in Section I.D. of this guidance, costs associated with changes to Federal administrative processes are taken into account in determining whether a waiver application satisfies the deficit neutrality requirement. Regulations at 31 CFR part 33 and 45 CFR part 155, subpart N require that such costs be included in the 10-year budget plan submitted by the state.

B. Internal Revenue Service

Certain changes that affect Internal Revenue Service (IRS) administrative processes may make a waiver proposal not feasible to implement. At this time, the IRS is not generally able to administer different sets of rules in different states. As a result, while a state may propose to entirely waive the application of one or more of the tax provisions listed in Section 1332 to taxpayers in the state, it is generally not feasible to design a waiver that would require the IRS to administer an alteration to these provisions for taxpayers in the state. For example, it is generally not feasible to have the IRS administer a different set of eligibility rules for the premium tax credit for residents of a particular state. States contemplating a waiver proposal that includes a modified version of a Federal tax provision may consider waiving the provision entirely and relying on a tax program administered by the state.

In addition, a waiver proposal that completely waives one or more tax provisions in a state may create administrative costs for the IRS. As noted in Section I.D. above, costs associated with changes to Federal administrative processes are taken into account in determining whether a waiver application satisfies the deficit neutrality requirement. Regulations at 31 CFR part 33 and 45 CFR part 155, subpart N require that such costs be included in the 10-year budget plan submitted by the state.

VI. Public Input on Waiver Proposals

Consistent with the statutory provisions of Section 1332, regulations at 31 CFR 33.112 and 45 CFR 155.1312 require states to provide a public notice and comment period for a waiver application sufficient to ensure a meaningful level of public input prior to submitting an application. As part of the public notice and comment period, a state with one or more Federally-recognized tribes must conduct a separate process for meaningful consultation with such tribes. Because State Innovation Waiver applications may vary significantly in their complexity and breadth, the regulations provide states with flexibility in determining the length of the comment period required to allow for meaningful and robust public engagement. The comment period must be sufficient to ensure a meaningful level of public input and in no case can be less than 30 days.

Consistent with HHS regulations, waiver applications must be posted online in a manner that meets national standards to assure access to individuals with disabilities. Such standards are issued by the Architectural and Transportation Barriers Compliance Board, and are referred to as ''section 508'' standards. Alternatively, the World Wide Web Consortium's Web Content Accessibility Guidelines (WCAG) 2.0 Level AA standards would also be considered as acceptable national standard for Web site accessibility. For more information, see the WCAG Web site at *http://www.w3.org/TR/WCAG20/.*

Section 1332 and its implementing regulations also require the Federal Government to provide a public notice and comment period, once the Secretaries receive an application. The period must be sufficient to ensure a meaningful level of public input and must not impose requirements that are in addition to, or duplicative of, requirements imposed under the Administrative Procedures Act, or requirements that are unreasonable or unnecessarily burdensome with respect to state compliance. As with the comment period described above, the length of the comment period should reflect the complexity of the proposal and in no case can be less than 30 days.

Dated: December 8, 2015.

Andrew M. Slavitt,

Acting Administrator, Centers for Medicare & Medicaid Services.

Dated: December 11, 2015.

Sylvia M. Burwell,

Secretary, Department of Health and Human Services.

Approved: December 10, 2015.

Mark J. Mazur,

Assistant Secretary of the Treasury (Tax Policy).

[FR Doc. 2015–31563 Filed 12–11–15; 4:15 pm]

BILLING CODE 4150–28–P

ENVIRONMENTAL PROTECTION AGENCY

40 CFR Part 52

[EPA–R01–OAR–2012–0950; A–1–FRL–9940–15–Region 1]

Air Plan Approval; NH; Infrastructure State Implementation Plan Requirements for Ozone, Lead, and Nitrogen Dioxide

AGENCY: Environmental Protection Agency (EPA).

ACTION: Final rule.

SUMMARY: The Environmental Protection Agency (EPA) is approving elements of State Implementation Plan (SIP) submissions from New Hampshire regarding the infrastructure requirements of the Clean Air Act (CAA or Act) for the 2008 lead, 2008 ozone, and 2010 nitrogen dioxide National Ambient Air Quality Standards (NAAQS). EPA is also converting conditional approvals for several infrastructure requirements for the 1997 and 2006 fine particle ($PM_{2.5}$) NAAQS to full approval under the CAA. Furthermore, we are updating the classification for one of New Hampshire's air quality control regions for ozone based on recent air quality monitoring data collected by the state, and are granting the state's request for an exemption from the infrastructure SIP contingency plan obligation for ozone. Last, we are conditionally approving certain elements of New Hampshire's submittal relating to prevention of significant deterioration requirements.

The infrastructure requirements are designed to ensure that the structural components of each state's air quality management program are adequate to meet the state's responsibilities under the CAA.

DATES: This rule is effective on January 15, 2016.

ADDRESSES: EPA has established a docket for this action under Docket Identification No. EPA–R01–OAR–2012–0950. All documents in the docket are listed on the *http://www.regulations.gov* Web site, although some information, such as confidential business information or other information whose disclosure is restricted by statute is not publically available. Certain other material, such as copyrighted material, is not placed on the Internet and will be publicly available only in hard copy form. Publicly available docket materials are available at *http://www.regulations.gov* or at the U.S. Environmental Protection Agency, EPA New England Regional Office, Office of Ecosystem Protection, Air Quality Planning Unit, 5 Post Office Square, Suite 100, Boston, MA. EPA requests that if at all possible, you contact the contact listed in the **FOR FURTHER INFORMATION CONTACT** section to schedule your inspection. The Regional Office's official hours of business are Monday through Friday, 8:30 a.m. to 4:30 p.m., excluding legal holidays. Copies of the documents relevant to this action are also available for public inspection during normal business hours, by appointment at: Air Resources Division, Department of Environmental Services, 6 Hazen Drive, P.O. Box 95, Concord, NH 03302–0095.

FOR FURTHER INFORMATION CONTACT: Bob McConnell, Environmental Engineer, Air Quality Planning Unit, Air Programs Branch (Mail Code OEP05–02), U.S. Environmental Protection Agency, Region 1, 5 Post Office Square, Suite 100, Boston, Massachusetts, 02109–3912; (617) 918–1046; *mcconnell.robert@epa.gov.*

SUPPLEMENTARY INFORMATION:

Throughout this document whenever ''we,'' ''us,'' or ''our'' is used, we mean EPA.

Organization of this document. The following outline is provided to aid in locating information in this preamble.

I. Background and Purpose

This rulemaking addresses infrastructure SIP submissions from the New Hampshire Department of Environmental Services (NH–DES) for the 2008 ozone, 2008 lead (Pb), and 2010 nitrogen dioxide (NO_2) national ambient air quality standards (NAAQS). The state submitted these infrastructure SIPs on the following dates: 2008 lead NAAQS—November 7, 2011; 2008 ozone NAAQS—December 31, 2012; and 2010 NO_2 NAAQS—January 28, 2013.

This rulemaking also addresses certain infrastructure SIP elements for the 1997 and 2006 fine particle ($PM_{2.5}$) [1] NAAQS for which EPA previously issued a conditional approval. See 77 FR 63228, October 16, 2012. The state submitted these infrastructure SIPs on April 3, 2008, and September 18, 2009, respectively. Additionally, in this final rulemaking we are updating the classification for one of New Hampshire's air quality control regions for ozone based on recent air quality monitoring data collected by the state, and are granting the state's request for an exemption from the infrastructure SIP contingency plan obligation for ozone. Last, we are conditionally approving certain elements of New Hampshire's submittal relating to prevention of significant deterioration (PSD) requirements.

II. Public Comments

EPA received just one set of comments in response to the NPR. Those comments—the full set of which are included in the docket for this final rulemaking—were submitted by the Sierra Club and focused overwhelmingly on our proposed approval of New Hampshire's infrastructure SIP for the 2010 SO_2 NAAQS, which is not addressed in this final rulemaking. Relevant to this action, one aspect of the comments touched glancingly on the infrastructure submittals for the 2008 ozone and 2010 NO_2 NAAQS. EPA received no public comments on our proposed approval of New Hampshire's infrastructure submittals for the 2008 lead NAAQS.

Comment: The commenter argued, among other things, that EPA must disapprove the SIP submittal for the 2010 SO_2 NAAQS, because New Hampshire did not include a submittal to satisfy section 110(D)(i)(I) (the so-called ''Good Neighbor'' provision). In a footnote, the commenter contended that New Hampshire had similarly not included a submittal to satisfy the same provision for the 2008 ozone or 2010 NO_2 NAAQS. The commenter argued that these omissions, coming as they did more than three years after EPA's promulgation of a new or revised NAAQS, are in violation of the Act and the Supreme Court's ruling in *EPA* v. *EME Homer City Generation, LP.*[2] Accordingly, the commenter contended that ''EPA must take immediate action here to disapprove the SO_2 I–SIP Certification (as well as the 2008 ozone and 2010 NO_2 I–SIPs, for that matter) and initiate the FIP [Federal Implementation Plan] process with regard to the I–SIP's '' 'Good Neighbor' provisions.''

Response: To be clear, EPA reiterates that this final rulemaking does not address New Hampshire's infrastructure SIP submittal for the 2010 SO_2 NAAQS. EPA will take final action on that submittal in a future final action, which will include a response to the Sierra Club's comments as to that submittal.

Section 110(a)(2)(D)(i)(I) addresses emissions that significantly contribute to nonattainment or interfere with maintenance of the NAAQS in another state. However, although EPA is acting on New Hampshire's submittals for the 2008 ozone and 2010 NO_2 NAAQS in this rulemaking, EPA is not taking any action with respect to section 110(D)(i)(I). As the commenter notes, New Hampshire did not include any provisions to address the requirements of section 110(a)(2)(D)(i)(I) in its December 31, 2012 and January 28, 2013 infrastructure SIP submittals for the 2008 ozone and 2010 NO_2 NAAQS, respectively. In the NPR, EPA did not propose to take any action with respect to New Hampshire's obligations pursuant to section 110(a)(2)(D)(i)(I) for the December 31, 2012 and January 28, 2013 infrastructure SIP submittals.

Because New Hampshire did not make a submission in its December 31, 2012 and January 28, 2013 SIP submittals to address the requirements of section 110(a)(2)(D)(i)(I), EPA is not required to have proposed or to take final SIP approval or disapproval action on this element under section 110(k) of the CAA. In this case, there has been no substantive submission for EPA to evaluate under section 110(k). Nor does the lack of a submission addressing section 110(a)(2)(D)(i)(I) require EPA to disapprove New Hampshire's December 31, 2012 and January 28, 2013 SIP submittals as to the other elements of section 110(a)(2). EPA interprets its authority under section 110(k)(3) of the CAA as affording EPA the discretion to approve, or conditionally approve, individual elements of New Hampshire's infrastructure SIP submissions, separate and apart from any action with respect to the requirements of section 110(a)(2)(D)(i)(I). EPA views discrete infrastructure SIP requirements in section 110(a)(2), such as the requirements of 110(a)(2)(D)(i)(I), as severable from the other infrastructure elements and interprets section 110(k)(3) as allowing it to act on

[1] $PM_{2.5}$ refers to particulate matter of 2.5 microns or less in diameter, oftentimes referred to as ''fine'' particles.

[2] 134 S. Ct. 1584 (2014).

individual severable measures in a plan submission.

On August 21, 2012, the D.C. Circuit issued a decision in *EME Homer City Generation, L.P.* v. *EPA* holding, among other things, that states had no obligation to submit good neighbor SIPs until the EPA had first quantified each state's good neighbor obligation.[3] Accordingly, under that decision the submission deadline for good neighbor SIPs under the CAA would not necessarily be tied to the promulgation of a new or revised NAAQS. While the EPA sought review first with the D.C. Circuit *en banc* and then with the United States Supreme Court, the EPA complied with the D.C. Circuit's ruling during the pendency of its appeal. The D.C. Circuit declined to consider EPA's appeal *en banc,* but, on April 29, 2014, the Supreme Court reversed the D.C. Circuit's *EME Homer City* opinion and held, among other things, that under the plain language of the CAA, states must submit SIPs addressing the good neighbor requirement in CAA section 110(a)(2)(D)(i)(I) within three years of promulgation of a new or revised NAAQS, regardless of whether the EPA first provides guidance, technical data or rulemaking to quantify the state's obligation.

With respect to the 2008 ozone NAAQS, on November 18, 2014, the Sierra Club and WildEarth Guardians filed a complaint in U.S. District Court for the Northern District of California seeking an order to compel the EPA to make findings of failure to submit good neighbor SIPs for over twenty states, including New Hampshire. On May 15, 2015, the court entered judgment ordering the EPA to sign a notice issuing its findings of failure to submit with respect to the 2008 ozone NAAQS interstate transport SIPs for states addressed in the case. Effective August 12, 2015, EPA found that 24 states, including New Hampshire, had not made a complete good neighbor SIP submittal for the 2008 ozone NAAQS to meet the requirements of section 110(a)(2)(D)(i)(I). *See* 80 FR 39961 (July 13, 2015). Pursuant to CAA section 110(c)(1), EPA is authorized and obligated to promulgate a FIP, if EPA takes any of the following actions: (1) Finds that a state has failed to make a required SIP submission; (2) finds that a required submission was incomplete; or (3) disapproves a required SIP submission in whole or in part. Accordingly, EPA must issue a relevant FIP with respect to the 2008 ozone NAAQS within two years, if New Hampshire has not submitted, and EPA has not approved, a plan revision appropriately addressing the good neighbor provision requirements. Thus, EPA is not required to issue a FIP at this time but will take appropriate action at a future date.

With respect to the 2010 NO_2 NAAQS, EPA has not issued a similar finding of failure to submit and, consequently, the two-year FIP clock has not yet begun to run. EPA agrees in general that sections 110(a)(1) and (a)(2) of the CAA require states to submit, within three years of promulgation of a new or revised NAAQS, a plan that addresses cross-state air pollution under section 110(a)(2)(D)(i)(I). In this rulemaking, however, EPA is only approving portions of New Hampshire's infrastructure SIP submissions for the 2010 NO_2 NAAQS, which did not include provisions for interstate transport under section 110(a)(2)(D)(i)(I). A finding of failure to submit a SIP submission for the 2010 NO_2 NAAQS addressing section 110(a)(2)(D)(i)(I) could occur in a separate rulemaking. As that issue was not addressed in the July 17, 2015 NPR,[4] and is thus not pertinent to this rulemaking, EPA provides no further response. In sum, New Hampshire's obligations regarding interstate transport of pollution for the 2008 ozone and 2010 NO_2 NAAQS will be addressed in later rulemakings.

III. Final Action

EPA is approving SIP submissions from New Hampshire certifying that the state's current SIP is sufficient to meet the required infrastructure elements under sections 110(a)(1) and (2) for the 2008 Pb, 2008 ozone, and 2010 NO_2 NAAQS, with the exception of certain aspects relating to the state's PSD program which we are conditionally approving. On September 25, 2015, we conditionally approved the portion of New Hampshire's PSD program that pertains to providing notification to neighboring states of certain permitting actions in New Hampshire. See 80 FR 57722. Therefore, we are conditionally approving herein the related portions of New Hampshire's infrastructure SIP submittals affected by our September 25, 2015 conditional approval. A summary of EPA's actions regarding these infrastructure SIP requirements are contained in Table 1 below.

TABLE 1—ACTION TAKEN ON NH INFRASTRUCTURE SIP SUBMITTALS FOR LISTED NAAQS

Element	2008 Pb	2008 Ozone	2010 NO_2
(A): Emission limits and other control measures	A	A	A
(B): Ambient air quality monitoring and data system	A	A	A
(C)(i): Enforcement of SIP measures	A	A	A
(C)(ii): PSD program for major sources and major modifications	A*	A*	A*
(C)(iii): Permitting program for minor sources and minor modifications	A	A	A
(D)(i)(I): Contribute to nonattainment/interfere with maintenance of NAAQS (prongs 1 and 2)	A	NS	NS
(D)(i)(II): PSD (prong 3)	A*	A*	A*
(D)(i)(II): Visibility Protection (prong 4)	A	A	A
(D)(ii): Interstate Pollution Abatement	A*	A*	A*
(D)(ii): International Pollution Abatement	A	A	A
(E)(i): Adequate resources	A	A	A
(E)(ii): State boards	A	A	A
(E)(iii): Necessary assurances with respect to local agencies	NA	NA	NA
(F): Stationary source monitoring system	A	A	A
(G): Emergency power	A	A	A
(H): Future SIP revisions	A	A	A
(I): Nonattainment area plan or plan revisions under part D	+	+	+
(J)(i): Consultation with government officials	A	A	A
(J)(ii): Public notification	A	A	A

[3] 696 F.3d 7, 31 (D.C. Cir. 2012).

[4] *See* 80 FR 42446, 42452 (July 17, 2015) (''In today's rulemaking, EPA is not proposing to approve or disapprove New Hampshire's compliance with section 110(a)(2)(D)(i)(I) with respect to the 2008 ozone, 2010 NO_2 and 2010 SO_2 NAAQS, since New Hampshire's infrastructure SIPs for these NAAQS do not include a submittal with respect to transport for sub-element 1, prongs 1 and 2.'').

TABLE 1—ACTION TAKEN ON NH INFRASTRUCTURE SIP SUBMITTALS FOR LISTED NAAQS—Continued

Element	2008 Pb	2008 Ozone	2010 NO_2
(J)(iii): PSD	A*	A*	A*
(J)(iv): Visibility protection	+	+	+
(K): Air quality modeling and data	A	A	A
(L): Permitting fees	A	A	A
(M): Consultation and participation by affected local entities	A	A	A

In the above table, the key is as follows:

A	Approve.
A*	Approve, but conditionally approve aspect of PSD program relating to notification to neighboring states.
+	Not germane to infrastructure SIPs.
NS	No Submittal.
NA	Not applicable.

Also, with respect to the 1997 and 2006 $PM_{2.5}$ NAAQS, EPA is approving New Hampshire's infrastructure SIP submittals requirements pertaining to elements (A) and (E)(ii), and the PSD elements (C)(ii), (D)(i)(II) (prong 3), and (J)(iii) for which a conditional approval was previously issued. See 77 FR 63228, October 16, 2012. As discussed in our July 17, 2015 notice of proposed rulemaking (''NPR'') (see 80 FR 42446), New Hampshire has since met the conditions outlined in our October 16, 2012 action. However, in keeping with the conditional approval we are issuing today for the 2008 lead, 2008 ozone, and 2010 NO_2 NAAQS with respect to the notification to neighboring states aspect of the state's PSD program, we are also newly conditionally approving New Hampshire's infrastructure SIP submittals for elements (C)(ii), (D)(i)(II) (prong 3), (D)(ii), and (J)(iii) for the 1997 and 2006 $PM_{2.5}$ NAAQS.

In addition, we are incorporating into the New Hampshire SIP the following New Hampshire statutes which were included for approval in New Hampshire's infrastructure SIP submittals:

Title I, The State and Its Government, Chapter 21–O: Department of Environmental Services, Section 21–O:11, Air Resources Council.

Title X Public Health, Chapter 125–C Air Pollution Control, Section 125–C:1—Declaration of Policy and Purpose; Section 125–C:2—Definitions; Section 125–C:4—Rulemaking Authority; Subpoena Power; Section 125–C:6—Powers and Duties of the Commissioner; Section 125–C:8—Administration of Chapter; Delegation of Duties; Section 125–C:9—Authority of the Commissioner in Cases of Emergency; Section 125–C:10—Devices Contributing to Air Pollution; Section 125–C:10a—Municipal Waste Combustion Units; Section 125–C:11—Permit Required; Section 125–C:12—Administrative Requirements; Section 125–C:13—Criteria for Denial; Suspension or Revocation; Modification; Section 125–C:14—Rehearings and Appeals; Section 125–C:18—Existing Remedies Unimpaired; Section 125–C:19—Protection of Powers; and Section 125–C:21—Severability.

Title X Public Health, Chapter 125–O: Multiple Pollutant Reduction Program, Section 125–O:1—Findings and Purpose; and Section 125–O:3—Integrated Power Plant Strategy.

Additionally, we are updating the classification at 40 CFR 52.1521 for the Merrimack Valley—Southern New Hampshire air quality control region for ozone based on recent air quality monitoring data collected by the state, and are granting, pursuant to 40 CFR 51.152(d)(1), the state's request for an exemption from the infrastructure SIP contingency plan obligation for ozone.

EPA is conditionally approving an aspect of New Hampshire's SIP revision submittals pertaining to the state's PSD program. The outstanding issue with the PSD program concerns the lack of a requirement that neighboring states be notified of the issuance of a PSD permit by the New Hampshire Department of Environmental Services. On September 25, 2015, we conditionally approved New Hampshire's PSD program for this reason. See 80 FR 57722. Accordingly, we are also conditionally approving this aspect of New Hampshire's infrastructure SIP revisions for the 2008 lead, 2008 ozone, 2010 NO_2, 1997 $PM_{2.5}$, and 2006 $PM_{2.5}$ NAAQS. New Hampshire must submit to EPA a SIP submittal addressing the above mentioned deficiency in the state's PSD program within the timeframe provided by our September 25, 2015 action. If the State fails to do so, the elements we are conditionally approving in this rulemaking will be disapproved on that date. EPA will notify the State by letter that this action has occurred. At that time, this commitment will no longer be a part of the approved New Hampshire SIP. EPA subsequently will publish a document in the **Federal Register** notifying the public that the conditional approval automatically converted to a disapproval. If the State meets its commitment within the applicable timeframe, the conditionally approved submission will remain a part of the SIP until EPA takes final action approving or disapproving the new submittal. If EPA disapproves the new submittal, the conditionally approved aspect of New Hampshire's PSD program will also be disapproved at that time. If EPA approves the revised PSD program submittal, then the portions of New Hampshire's infrastructure SIP submittals that were conditionally approved will be fully approved in their entirety and replace the conditional approval in the SIP. In addition, final disapproval of an infrastructure SIP submittal triggers the Federal implementation plan (FIP) requirement under section 110(c).

Other specific requirements of infrastructure SIPs and the rationale for EPA's final action on New Hampshire's submittals are explained in the NPR and will not be restated here.

IV. Statutory and Executive Order Reviews

Under the Clean Air Act, the Administrator is required to approve a SIP submission that complies with the provisions of the Act and applicable Federal regulations. 42 U.S.C. 7410(k); 40 CFR 52.02(a). Thus, in reviewing SIP submissions, EPA's role is to approve state choices, provided that they meet the criteria of the Clean Air Act. Accordingly, this action merely approves state law as meeting Federal requirements and does not impose additional requirements beyond those imposed by state law. For that reason, this action:

- Is not a significant regulatory action subject to review by the Office of Management and Budget under Executive Orders 12866 (58 FR 51735, October 4, 1993) and 13563 (76 FR 3821, January 21, 2011);
- Does not impose an information collection burden under the provisions of the Paperwork Reduction Act (44 U.S.C. 3501 *et seq.*);
- Is certified as not having a significant economic impact on a

substantial number of small entities under the Regulatory Flexibility Act (5 U.S.C. 601 *et seq.*);

• Does not contain any unfunded mandate or significantly or uniquely affect small governments, as described in the Unfunded Mandates Reform Act of 1995 (Public Law 104–4);

• Does not have Federalism implications as specified in Executive Order 13132 (64 FR 43255, August 10, 1999);

• Is not an economically significant regulatory action based on health or safety risks subject to Executive Order 13045 (62 FR 19885, April 23, 1997);

• Is not a significant regulatory action subject to Executive Order 13211 (66 FR 28355, May 22, 2001);

• Is not subject to requirements of Section 12(d) of the National Technology Transfer and Advancement Act of 1995 (15 U.S.C. 272 note) because application of those requirements would be inconsistent with the Clean Air Act; and

• Does not provide EPA with the discretionary authority to address, as appropriate, disproportionate human health or environmental effects, using practicable and legally permissible methods, under Executive Order 12898 (59 FR 7629, February 16, 1994).

In addition, the SIP is not approved to apply on any Indian reservation land or in any other area where EPA or an Indian tribe has demonstrated that a tribe has jurisdiction. In those areas of Indian country, the rule does not have tribal implications and will not impose substantial direct costs on tribal governments or preempt tribal law as specified by Executive Order 13175 (65 FR 67249, November 9, 2000).

The Congressional Review Act, 5 U.S.C. 801 *et seq.,* as added by the Small Business Regulatory Enforcement Fairness Act of 1996, generally provides that before a rule may take effect, the agency promulgating the rule must submit a rule report, which includes a copy of the rule, to each House of the Congress and to the Comptroller General of the United States. EPA will submit a report containing this action and other required information to the U.S. Senate, the U.S. House of Representatives, and the Comptroller General of the United States prior to publication of the rule in the **Federal Register**. A major rule cannot take effect until 60 days after it is published in the **Federal Register**. This action is not a ''major rule'' as defined by 5 U.S.C. 804(2).

Under section 307(b)(1) of the Clean Air Act, petitions for judicial review of this action must be filed in the United States Court of Appeals for the appropriate circuit by February 16, 2016. Filing a petition for reconsideration by the Administrator of this final rule does not affect the finality of this action for the purposes of judicial review nor does it extend the time within which a petition for judicial review may be filed, and shall not postpone the effectiveness of such rule or action. This action may not be challenged later in proceedings to enforce its requirements. (See section 307(b)(2).)

List of Subjects in 40 CFR Part 52

Environmental protection, Air pollution control, Incorporation by reference, Intergovernmental relations, Lead, Nitrogen dioxide, Ozone, Particulate matter, Reporting and recordkeeping requirements, Sulfur oxides, Volatile organic compounds.

Dated: December 2, 2015.

H. Curtis Spalding,

Regional Administrator, EPA New England.

Part 52 of chapter I, title 40 of the Code of Federal Regulations is amended as follows:

PART 52—APPROVAL AND PROMULGATION OF IMPLEMENTATION PLANS

■ 1. The authority citation for part 52 continues to read as follows:

Authority: 42 U.S.C. 7401 *et seq.*

Subpart EE—New Hampshire

■ 2. Section 52.1519 is amended by removing and reserving paragraphs (a)(3) and (4) and adding paragraphs (a)(6) through (10) to read as follows:

§ 52.1519 Identification of plan—conditional approval.

(a) * * *

(6) 2008 Ozone NAAQS: The 110(a)(2) infrastructure SIP submitted on December 31, 2012, is conditionally approved for Clean Air Act (CAA) elements 110(a)(2)(C)(ii), (D)(i)(II), D(ii), and (J)(iii) only as it relates to the aspect of the PSD program pertaining to providing notification to neighboring states of certain permitting activity being considered by New Hampshire. This conditional approval is contingent upon New Hampshire taking actions to address these requirements as detailed within a final conditional approval dated September 25, 2015.

(7) 2008 Lead NAAQ: The 110(a)(2) infrastructure SIP submitted on November 7, 2011, is conditionally approved for Clean Air Act (CAA) elements 110(a)(2)(C)(ii), (D)(i)(II), D(ii), and (J)(iii) only as it relates to the aspect of the PSD program pertaining to providing notification to neighboring states of certain permitting activity being considered by New Hampshire. This conditional approval is contingent upon New Hampshire taking actions to address these requirements as detailed within a final conditional approval dated September 25, 2015.

(8) 2010 Nitrogen Dioxide NAAQS: The 110(a)(2) infrastructure SIP submitted on January 28, 2013, is conditionally approved for Clean Air Act (CAA) elements 110(a)(2)(C)(ii), (D)(i)(II), D(ii), and (J)(iii) only as it relates to the aspect of the PSD program pertaining to providing notification to neighboring states of certain permitting activity being considered by New Hampshire. This conditional approval is contingent upon New Hampshire taking actions to address these requirements as detailed within a final conditional approval dated September 25, 2015.

(9) 1997 $PM_{2.5}$ NAAQS: The 110(a)(2) infrastructure SIP submitted on April 3, 2008, is conditionally approved for Clean Air Act (CAA) elements 110(a)(2)(C)(ii), (D)(i)(II), D(ii), and (J)(iii) only as it relates to the aspect of the PSD program pertaining to providing notification to neighboring states of certain permitting activity being considered by New Hampshire. This conditional approval is contingent upon New Hampshire taking actions to address these requirements as detailed within a final conditional approval dated September 25, 2015.

(10) 2006 $PM_{2.5}$ NAAQS: The 110(a)(2) infrastructure SIP submitted on September 18, 2009, is conditionally approved for Clean Air Act (CAA) elements 110(a)(2)(C)(ii), (D)(i)(II), D(ii), and (J)(iii) only as it relates to the aspect of the PSD program pertaining to providing notification to neighboring states of certain permitting activity being considered by New Hampshire. This conditional approval is contingent upon New Hampshire taking actions to address these requirements as detailed within a final conditional approval dated September 25, 2015.

■ 3. Section 52.1520 is amended by:

■ a. In the table in paragraph (c), adding three entries at the end of the table; and

■ b. In the table in paragraph (e), adding six entries at the end of the table.

The additions read as follows:

§ 52.1520 Identification of plan.

* * * * *

(c) * * *

EPA-APPROVED NEW HAMPSHIRE REGULATIONS

State citation	Title/subject	State effective date	EPA approved date [1]	Explanations
*	* *	*	*	* *
Title 1 of the New Hampshire Statues: The State and Its Government, Chapter 21-O.	Department of Environmental Services.	7/1/86	12/16/15 [Insert **Federal Register** citation].	Section 21–O:11, Air Resources Council.
Title X of the New Hampshire Statutes: Public Health, Chapter 125–C.	Air Pollution Control	7/1/79	12/16/15 [Insert **Federal Register** citation].	Section 125–C:1—Declaration of Policy and Purpose; Section 125–C:2—Definitions; Section 125–C:4—Rulemaking Authority; Subpoena Power; Section 125–C:6—Powers and Duties of the Commissioner; Section 125–C:8—Administration of Chapter; Delegation of Duties; Section 125–C:9—Authority of the Commissioner in Cases of Emergency; Section 125–C:10—Devices Contributing to Air Pollution; Section 125–C:10a—Municipal Waste Combustion Units; Section 125–C:11—Permit Required; Section 125–C:12—Administrative Requirements; Section 125–C:13—Criteria for Denial; Suspension or Revocation; Modification; Section 125–C:14—Rehearings and Appeals; Section 125–C:18—Existing Remedies Unimpaired; Section 125–C:19—Protection of Powers; and Section 125–C:21—Severability.
Title X of the New Hampshire Statutes: Public Health, Chapter 125–O.	Multiple Pollutant Reduction Program.	7/1/2002	12/16/15 [Insert **Federal Register** citation].	Section 125–O:1—Findings and Purpose; Section 125—O:3—Integrated Power Plant Strategy.

[1] In order to determine the EPA effective date for a specific provision listed in this table, consult the **Federal Register** notice cited in this column for the particular provision.

* * * * * (e) * * *

NEW HAMPSHIRE NONREGULATORY

Name of nonregulatory SIP provision	Applicable geographic or nonattainment area	State submittal date/effective date	EPA approved date [3]	Explanations
*	* *	*	*	* *
Infrastructure SIP for 2008 ozone NAAQS.	Statewide	12/31/2012	12/16/15 [Insert **Federal Register** citation].	Approved submittal, except for certain aspects relating to PSD which were conditionally approved. See 52.1519.
Infrastructure SIP for the 2008 Lead NAAQS.	Statewide	11/7/2011	12/16/15 [Insert **Federal Register** citation].	Approved submittal, except for certain aspects relating to PSD which were conditionally approved. See 52.1519.
Infrastructure SIP for the 2010 NO_2 NAAQS.	Statewide	1/28/2013	12/16/15 [Insert **Federal Register** citation].	Approved submittal, except for certain aspects relating to PSD which were conditionally approved. See 52.1519.
Infrastructure SIP for the 1997 $PM_{2.5}$ NAAQS.	Statewide	7/3/2012	12/16/15 [Insert **Federal Register** citation].	Items that were previously conditionally approved on 10/16/12 now fully approved.
Infrastructure SIP for 2006 $PM_{2.5}$ NAAQS.	Statewide	9/18/2009	12/16/15 [Insert **Federal Register** citation].	Items that were previously conditionally approved on 10/16/12 now fully approved.
Request for exemption from contingency plan obligation.	Merrimack Valley—Southern New Hampshire AQCR.	12/31/2012	12/16/15 [Insert **Federal Register** citation].	State's request for exemption from contingency plan obligation, made pursuant to 40 CFR 51.122(d), is granted in light of the area's designation as unclassifiable/attainment for the 2008 ozone NAAQS.

[3] In order to determine the EPA effective date for a specific provision listed in this table, consult the **Federal Register** notice cited in this column for the particular provision.

■ 4. In § 52.1521, revise the table to read as follows:

§ 52.1521 Classification of regions.

* * * * *

Air quality control region	Pollutant				
	Particulate matter	Sulfur oxides	Nitrogen dioxide	Carbon monoxide	Ozone
Androscoggin Valley Interstate	IA	IA	III	III	III
Central New Hampshire Intrastate	III	III	III	III	III
Merrimack Valley—Southern New Hampshire Interstate	I	I	III	III	I

[FR Doc. 2015–31525 Filed 12–15–15; 8:45 am]

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ENVIRONMENTAL PROTECTION AGENCY

40 CFR Part 180

[EPA–HQ–OPP–2008–0762; FRL–9939–54]

Bacillus Amyloliquefaciens MBI600 (Antecedent Bacillus Subtilis MBI600); Amendment to an Exemption From the Requirement of a Tolerance

AGENCY: Environmental Protection Agency (EPA).

ACTION: Final rule.

SUMMARY: This regulation amends the existing exemption from the requirement of a tolerance for residues of the microbial pesticide *Bacillus subtilis* strain MBI600 to change the name to *Bacillus amyloliquefaciens* strain MBI600 (antecedent *Bacillus subtilis* strain MBI600) in or on all food commodities, including residues resulting from post-harvest uses, when applied or used in accordance with good agricultural practices. BASF Corporation submitted a petition to EPA under the Federal Food, Drug, and Cosmetic Act (FFDCA), requesting an amendment to the existing exemption from the requirement of a tolerance. This regulation eliminates the need to establish a maximum permissible level for residues of *Bacillus amyloliquefaciens* strain MBI600.

DATES: This regulation is effective December 16, 2015. Objections and requests for hearings must be received on or before February 16, 2016, and must be filed in accordance with the instructions provided in 40 CFR part 178 (see also Unit I.C. of the **SUPPLEMENTARY INFORMATION**).

ADDRESSES: The docket for this action, identified by docket identification (ID) number EPA–HQ–OPP–2008–0762, is available at *http://www.regulations.gov* or at the Office of Pesticide Programs Regulatory Public Docket (OPP Docket) in the Environmental Protection Agency Docket Center (EPA/DC), West William Jefferson Clinton Bldg., Rm. 3334, 1301 Constitution Ave. NW., Washington, DC 20460–0001. The Public Reading Room is open from 8:30 a.m. to 4:30 p.m., Monday through Friday, excluding legal holidays. The telephone number for the Public Reading Room is (202) 566–1744, and the telephone number for the OPP Docket is (703) 305–5805. Please review the visitor instructions and additional information about the docket available at *http://www.epa.gov/dockets.*

FOR FURTHER INFORMATION CONTACT: Robert McNally, Biopesticides and Pollution Prevention Division (7511P), Office of Pesticide Programs, Environmental Protection Agency, 1200 Pennsylvania Ave. NW., Washington, DC 20460–0001; main telephone number: (703) 305–7090; email address: *BPPDFRNotices@epa.gov.*

SUPPLEMENTARY INFORMATION:

I. General Information

A. Does this action apply to me?

You may be potentially affected by this action if you are an agricultural producer, food manufacturer, or pesticide manufacturer. The following list of North American Industrial Classification System (NAICS) codes is not intended to be exhaustive, but rather provides a guide to help readers determine whether this document applies to them. Potentially affected entities may include:

- Crop production (NAICS code 111).
- Animal production (NAICS code 112).
- Food manufacturing (NAICS code 311).
- Pesticide manufacturing (NAICS code 32532).

B. How can I get electronic access to other related information?

You may access a frequently updated electronic version of 40 CFR part 180 through the Government Printing Office's e-CFR site at *http://www.ecfr.gov/cgi-bin/text-idx?&c=ecfr&tpl=/ecfrbrowse/Title40/40tab_02.tpl.*

C. How can I file an objection or hearing request?

Under FFDCA section 408(g), 21 U.S.C. 346a, any person may file an objection to any aspect of this regulation and may also request a hearing on those objections. You must file your objection or request a hearing on this regulation in accordance with the instructions provided in 40 CFR part 178. To ensure proper receipt by EPA, you must identify docket ID number EPA–HQ–OPP–2008–0762 in the subject line on the first page of your submission. All objections and requests for a hearing must be in writing, and must be received by the Hearing Clerk on or before February 16, 2016. Addresses for mail and hand delivery of objections and hearing requests are provided in 40 CFR 178.25(b).

In addition to filing an objection or hearing request with the Hearing Clerk as described in 40 CFR part 178, please submit a copy of the filing (excluding any Confidential Business Information (CBI)) for inclusion in the public docket. Information not marked confidential pursuant to 40 CFR part 2 may be disclosed publicly by EPA without prior notice. Submit the non-CBI copy of your objection or hearing request, identified by docket ID number EPA–HQ–OPP–2008–0762, by one of the following methods:

- *Federal eRulemaking Portal: http://www.regulations.gov.* Follow the online instructions for submitting comments. Do not submit electronically any information you consider to be CBI or other information whose disclosure is restricted by statute.
- *Mail:* OPP Docket, Environmental Protection Agency Docket Center (EPA/DC), (28221T), 1200 Pennsylvania Ave. NW., Washington, DC 20460–0001.
- *Hand Delivery:* To make special arrangements for hand delivery or delivery of boxed information, please follow the instructions at *http://www.epa.gov/dockets/contacts.html.*

Additional instructions on commenting or visiting the docket, along with more information about dockets generally, is available at *http://www.epa.gov/dockets.*

II. Background

In the **Federal Register** of April 6, 2015 (80 FR 18327) (FRL–9924–00), EPA issued a document pursuant to FFDCA section 408(d)(3), 21 U.S.C. 346a(d)(3), announcing the filing of a pesticide tolerance petition (PP 4F8336) by BASF Corporation, 26 Davis Drive, Research Triangle Park, NC 27709. The petition requested that 40 CFR 180.1128 be amended to change the species name of the pesticide chemical substance covered by the existing exemption, *i.e.,* from the microbial pesticide ''*Bacillus subtilis* strain MBI600'' to ''*Bacillus amyloliquefaciens* strain MBI600 (antecedent *Bacillus subtilis* strain MBI600).'' The remaining terms of the exemption would remain the same, *i.e.,* residues of the pesticide would be exempted from the requirement of a tolerance in or on all food commodities, including residues resulting from post-harvest uses, when applied or used in accordance with good agricultural practices. That document referenced a summary of the petition prepared by the petitioner BASF Corporation, which is available in the docket, *http://www.regulations.gov.* There were no comments received in response to the notice of filing.

III. Final Rule

A. EPA's Safety Determination

Section 408(c)(2)(A)(i) of FFDCA allows EPA to establish an exemption from the requirement for a tolerance (the legal limit for a pesticide chemical residue in or on a food) only if EPA determines that the exemption is ''safe.'' Section 408(c)(2)(A)(ii) of FFDCA defines ''safe'' to mean that ''there is a reasonable certainty that no harm will result from aggregate exposure to the pesticide chemical residue, including all anticipated dietary exposures and all other exposures for which there is reliable information.'' This includes exposure through drinking water and in residential settings, but does not include occupational exposure. Pursuant to FFDCA section 408(c)(2)(B), in establishing or maintaining in effect an exemption from the requirement of a tolerance, EPA must take into account the factors set forth in FFDCA section 408(b)(2)(C), which require EPA to give special consideration to exposure of infants and children to the pesticide chemical residue in establishing a tolerance and to ''ensure that there is a reasonable certainty that no harm will result to infants and children from aggregate exposure to the pesticide chemical residue. . . . '' Additionally, FFDCA section 408(b)(2)(D) requires that the Agency consider ''available information concerning the cumulative effects of a particular pesticide's residues'' and ''other substances that have a common mechanism of toxicity.''

EPA evaluated the available identity, toxicity and exposure data on *Bacillus amyloliquefaciens* strain MBI600 *(antecedent Bacillus subtilis* strain MBI600) and considered its validity, completeness, and reliability, as well as the relationship of this information to human risk. A full explanation of the data upon which EPA relied and its risk assessment based on that data can be found within the October 5, 2015, document entitled ''Federal Food, Drug, and Cosmetic Act (FFDCA) Considerations *Bacillus amyloliquefaciens* strain MBI600.'' This document, as well as other relevant information, is available in the docket for this action as described under **ADDRESSES**. Based upon its evaluation, EPA concludes that there is a reasonable certainty that no harm will result to the U.S. population, including infants and children, from aggregate exposure to residues of *Bacillus amyloliquefaciens* strain MBI600. Therefore, the existing tolerance exemption for *Bacillus subtilis* strain MBI600 is amended by establishing an exemption from the requirement of a tolerance for residues of the biofungicide *Bacillus amyloliquefaciens* strain MBI600 (antecedent Bacillus subtilis strain MBI600) in or on all food commodities, including residues resulting from post-harvest uses, when applied or used in accordance with good agricultural practices.

B. Analytical Enforcement Methodology

An analytical method is not required for enforcement purposes since the Agency is amending an existing exemption from the requirement of a tolerance without any numerical limitation for the reasons contained in the October 5, 2015 document entitled ''Federal Food, Drug, and Cosmetic Act (FFDCA) Considerations for *Bacillus amyloliquefaciens* strain MBI600.''

IV. Statutory and Executive Order Reviews

This action amends a tolerance exemption under FFDCA section 408(d) in response to a petition submitted to the Agency. The Office of Management and Budget (OMB) has exempted these types of actions from review under Executive Order 12866, entitled ''Regulatory Planning and Review'' (58 FR 51735, October 4, 1993). Because this action has been exempted from review under Executive Order 12866, this action is not subject to Executive Order 13211, entitled ''Actions Concerning Regulations That Significantly Affect Energy Supply, Distribution, or Use'' (66 FR 28355, May 22, 2001) or Executive Order 13045, entitled ''Protection of Children from Environmental Health Risks and Safety Risks'' (62 FR 19885, April 23, 1997). This action does not contain any information collections subject to OMB approval under the Paperwork Reduction Act (PRA), 44 U.S.C. 3501 *et seq.,* nor does it require any special considerations under Executive Order 12898, entitled ''Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations'' (59 FR 7629, February 16, 1994).

Since tolerances and exemptions that are established on the basis of a petition under FFDCA section 408(d), such as the tolerance in this final rule, do not require the issuance of a proposed rule, the requirements of the Regulatory Flexibility Act (RFA) (5 U.S.C. 601 *et seq.*), do not apply.

This action directly regulates growers, food processors, food handlers, and food retailers, not States or tribes, nor does this action alter the relationships or distribution of power and responsibilities established by Congress in the preemption provisions of FFDCA section 408(n)(4). As such, the Agency has determined that this action will not have a substantial direct effect on States or tribal governments, on the relationship between the national government and the States or tribal governments, or on the distribution of power and responsibilities among the various levels of government or between the Federal Government and Indian tribes. Thus, the Agency has determined that Executive Order 13132, entitled ''Federalism'' (64 FR 43255, August 10, 1999) and Executive Order 13175, entitled ''Consultation and Coordination with Indian Tribal Governments'' (65 FR 67249, November 9, 2000) do not apply to this action. In addition, this action does not impose any enforceable duty or contain any unfunded mandate as described under Title II of the Unfunded Mandates Reform Act (UMRA) (2 U.S.C. 1501 *et seq.*).

This action does not involve any technical standards that would require Agency consideration of voluntary consensus standards pursuant to section 12(d) of the National Technology Transfer and Advancement Act (NTTAA) (15 U.S.C. 272 note).

V. Congressional Review Act

Pursuant to the Congressional Review Act (5 U.S.C. 801 *et seq.*), EPA will submit a report containing this rule and other required information to the U.S.

Senate, the U.S. House of Representatives, and the Comptroller General of the United States prior to publication of the rule in the **Federal Register**. This action is not a ''major rule'' as defined by 5 U.S.C. 804(2).

List of Subjects in 40 CFR Part 180

Environmental protection, Administrative practice and procedure, Agricultural commodities, Pesticides and pests, Reporting and recordkeeping requirements.

Dated: December 3, 2015.

Robert McNally,

Director, Biopesticides and Pollution Prevention Division, Office of Pesticide Programs.

Therefore, 40 CFR chapter I is amended as follows:

PART 180—[AMENDED]

■ 1. The authority citation for part 180 continues to read as follows:

Authority: 21 U.S.C. 321(q), 346a and 371.

■ 2. Revise § 180.1128 to read as follows:

§ 180.1128 *Bacillus amyloliquefaciens* MBI600; exemption from the requirement of a tolerance.

An exemption from the requirement of a tolerance is established for residues of the biofungicide *Bacillus amyloliquefaciens* MBI600 (antecedent *Bacillus subtilis* MBI600) in or on all food commodities, including residues resulting from post-harvest uses, when applied or used in accordance with good agricultural practices.

[FR Doc. 2015–31462 Filed 12–15–15; 8:45 am]

BILLING CODE 6560–50–P

ENVIRONMENTAL PROTECTION AGENCY

40 CFR Part 180

[EPA–HQ–OPP–2015–0766; FRL–9939–95]

Extension of Pesticide Residue Tolerances for Emergency Exemptions (Multiple Chemicals)

AGENCY: Environmental Protection Agency (EPA).

ACTION: Final rule.

SUMMARY: This regulation extends existing time-limited tolerances for residues of the pesticides bifenthrin in or on apple, peach and nectarine; dinotefuran in or on pome fruit and stone fruit; imidacloprid in or on sugarcane, cane and sugarcane molasses; and streptomycin in or on grapefruit and grapefruit, dried pulp. These actions are in response to EPA's granting of emergency exemptions under the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) authorizing use of these pesticides. In addition, the Federal Food, Drug, and Cosmetic Act (FFDCA) requires EPA to establish a time-limited tolerance or exemption from the requirement for a tolerance for pesticide chemical residues in food that will result from the use of a pesticide under an emergency exemption granted by EPA.

DATES: This regulation is effective December 16, 2015. Objections and requests for hearings must be received on or before February 16, 2016, and must be filed in accordance with the instructions provided in 40 CFR part 178 (see also Unit I.C. of the **SUPPLEMENTARY INFORMATION**).

ADDRESSES: The docket for this action, identified by docket identification (ID) number EPA–HQ–OPP–2015–0766, is available at *http://www.regulations.gov* or at the Office of Pesticide Programs Regulatory Public Docket (OPP Docket) in the Environmental Protection Agency Docket Center (EPA/DC), West William Jefferson Clinton Bldg., Rm. 3334, 1301 Constitution Ave. NW., Washington, DC 20460–0001. The Public Reading Room is open from 8:30 a.m. to 4:30 p.m., Monday through Friday, excluding legal holidays. The telephone number for the Public Reading Room is (202) 566–1744, and the telephone number for the OPP Docket is (703) 305–5805. Please review the visitor instructions and additional information about the docket available at *http://www.epa.gov/dockets.*

FOR FURTHER INFORMATION CONTACT: Susan Lewis, Registration Division (7505P), Office of Pesticide Programs, Environmental Protection Agency, 1200 Pennsylvania Ave. NW., Washington, DC 20460–0001; main telephone number: (703) 305–7090; email address: *RDFRNotices@epa.gov.*

SUPPLEMENTARY INFORMATION:

I. General Information

A. Does this action apply to me?

You may be potentially affected by this action if you are an agricultural producer, food manufacturer, or pesticide manufacturer. The following list of North American Industrial Classification System (NAICS) codes is not intended to be exhaustive, but rather provides a guide to help readers determine whether this document applies to them. Potentially affected entities may include:

- Crop production (NAICS code 111).
- Animal production (NAICS code 112).
- Food manufacturing (NAICS code 311).
- Pesticide manufacturing (NAICS code 32532).

B. How can I get electronic access to other related information?

You may access a frequently updated electronic version of 40 CFR part 180 through the Government Printing Office's e-CFR site at *http://www.ecfr.gov/cgi-bin/text-idx?&c=ecfr&tpl=/ecfrbrowse/Title40/40tab_02.tpl.*

C. How can I file an objection or hearing request?

Under FFDCA section 408(g), 21 U.S.C. 346a, any person may file an objection to any aspect of this regulation and may also request a hearing on those objections. You must file your objection or request a hearing on this regulation in accordance with the instructions provided in 40 CFR part 178. To ensure proper receipt by EPA, you must identify docket ID number EPA–HQ–OPP–2015–0766 in the subject line on the first page of your submission. All requests must be in writing, and must be received by the Hearing Clerk on or before February 16, 2016. Addresses for mail and hand delivery of objections and hearing requests are provided in 40 CFR 178.25(b).

In addition to filing an objection or hearing request with the Hearing Clerk as described in 40 CFR part 178, please submit a copy of the filing (excluding any Confidential Business Information (CBI)) for inclusion in the public docket. Information not marked confidential pursuant to 40 CFR part 2 may be disclosed publicly by EPA without prior notice. Submit the non-CBI copy of your objection or hearing request, identified by docket ID number EPA–HQ–OPP–2015–0766 by one of the following methods:

- *Federal eRulemaking Portal: http://www.regulations.gov.* Follow the online instructions for submitting comments. Do not submit electronically any information you consider to be CBI or other information whose disclosure is restricted by statute.
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II. Background and Statutory Findings

EPA published final rules in the **Federal Register** for each chemical listed. The initial issuance of these final rules announced that EPA, on its own initiative, under FFDCA section 408, 21 U.S.C. 346a, was establishing time-limited tolerances for residues of a pesticide in or on one or more food commodities.

EPA established the tolerances because FFDCA section 408(l)(6) requires EPA to establish a time-limited tolerance, or exemption from the requirement for a tolerance, for pesticide chemical residues in food that will result from the use of a pesticide under an emergency exemption granted by EPA under FIFRA section 18. Such tolerances can be established without providing notice or time for public comment.

EPA received requests to extend the emergency use of these chemicals for this year's growing season. After having reviewed these submissions, EPA concurs that emergency conditions continue to exist. EPA assessed the potential risks presented by residues for each chemical. In doing so, EPA considered the safety standard in FFDCA section 408(b)(2), and decided that the necessary tolerance under FFDCA section 408(l)(6) would be consistent with the safety standard and with FIFRA section 18.

The data and other relevant material have been evaluated and discussed in the final rules originally published to support these uses. Based on that data and information considered, the Agency reaffirms that extension of these time-limited tolerances will continue to meet the requirements of FFDCA section 408(l)(6). Therefore, each of the time-limited tolerances is extended until the date listed, when they will expire and become revoked. EPA intends to publish a document in the **Federal Register** to remove the revoked tolerances from the Code of Federal Regulations (CFR). Although these tolerances will expire and are revoked on the dates listed, under FFDCA section 408(l)(5), residues of a pesticide not in excess of the amount specified in the tolerance remaining in or on a commodity after that date will not be unlawful, provided the residues are present as a result of an application or use of the pesticide at a time and in a manner that was lawful under FIFRA, a tolerance was in place at the time of the application, and the residues do not exceed the level that was authorized by the tolerance. EPA will take action to revoke these tolerances earlier if any experience with, scientific data on, or other relevant information on these pesticides indicates that the residues are not safe.

Tolerances for the use of the following pesticide chemicals on specific commodities are being extended:

Bifenthrin. EPA has authorized under FIFRA section 18 the use of bifenthrin on apple, peach, and nectarine for control of the brown marmorated stinkbug in multiple states. This regulation extends existing time-limited tolerances for residues of the insecticide bifenthrin, including its metabolites and degradates, in or on apple, peach, and nectarine at 0.5 part per million (ppm) for an additional 3-year period. These tolerances will expire and are revoked on December 31, 2018. The time-limited tolerances were originally published in the **Federal Register** of September 14, 2012 (77 FR 56782) (FRL–9361–6).

Dinotefuran. EPA has authorized under FIFRA section 18 the use of dinotefuran on pome fruit and stone fruit for control of the brown marmorated stinkbug in multiple states. This regulation extends existing time-limited tolerances for residues of the insecticide dinotefuran, including its metabolites and degradates, in or on fruit, pome, group 11 and fruit, stone, group 12 at 2.0 ppm for an additional three-year period. These tolerances will expire and are revoked on December 31, 2018. The time-limited tolerances were originally published in the **Federal Register** of November 9, 2012 (77 FR 67282) (FRL–9366–3), and revised in the **Federal Register** of January 22, 2014 (79 FR 3508) (FRL–9402–8).

Imidacloprid. EPA has authorized under FIFRA section 18 the use of imidacloprid on sugarcane for control of the West Indian cane fly in Louisiana. This regulation extends existing time-limited tolerances for residues of the insecticide imidacloprid, including its metabolites and degradates, in or on sugarcane, cane at 6.0 ppm and sugarcane, molasses at 50 ppm for an additional 3-year period. These tolerances will expire and are revoked on December 31, 2018. The time-limited tolerances were originally published in the **Federal Register** of June 5, 2013 (78 FR 33736) (FRL–9387–9).

Streptomycin. EPA has authorized under FIFRA section 18 the use of streptomycin on grapefruit for control of citrus canker in Florida. This regulation extends existing time-limited tolerances for residues of the pesticide streptomycin, including its metabolites and degradates, in or on grapefruit at 0.15 ppm and grapefruit, dried pulp at 0.40 ppm for an additional 3-year period. These tolerances will expire and are revoked on December 31, 2018. The time-limited tolerances were originally published in the **Federal Register** of May 17, 2013 (78 FR 29049) (FRL–9385–3).

III. International Residue Limits

In making its tolerance decisions, EPA seeks to harmonize U.S. tolerances with international standards whenever possible, consistent with U.S. food safety standards and agricultural practices. EPA considers the international maximum residue limits (MRLs) established by the Codex Alimentarius Commission (Codex), as required by FFDCA section 408(b)(4). The Codex Alimentarius is a joint United Nations Food and Agriculture Organization/World Health Organization food standards program, and it is recognized as an international food safety standards-setting organization in trade agreements to which the United States is a party. EPA may establish a tolerance that is different from a Codex MRL; however, FFDCA section 408(b)(4) requires that EPA explain the reasons for departing from the Codex level.

The Codex has not established MRLs for bifenthrin in/on apple, peach, or nectarine; dinotefuran in/on pome fruit or stone fruit; imidacloprid in/on sugarcane, cane or sugarcane molasses; nor streptomycin in/on grapefruit or grapefruit, dried pulp.

IV. Statutory and Executive Order Reviews

This action establishes tolerances under FFDCA sections 408(e) and 408(l)(6). The Office of Management and Budget (OMB) has exempted these types of actions from review under Executive Order 12866, entitled ''Regulatory Planning and Review'' (58 FR 51735, October 4, 1993). Because this action has been exempted from review under Executive Order 12866, this action is not subject to Executive Order 13211, entitled ''Actions Concerning Regulations That Significantly Affect Energy Supply, Distribution, or Use'' (66 FR 28355, May 22, 2001) or Executive Order 13045, entitled ''Protection of Children from Environmental Health Risks and Safety Risks'' (62 FR 19885, April 23, 1997). This action does not contain any information collections subject to OMB approval under the Paperwork Reduction Act (PRA) (44 U.S.C. 3501 *et seq.*), nor does it require any special considerations under Executive Order 12898, entitled ''Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations'' (59 FR 7629, February 16, 1994).

Since tolerances and exemptions that are established under FFDCA sections 408(e) and 408(l)(6), such as the tolerances in this final rule, do not require the issuance of a proposed rule, the requirements of the Regulatory Flexibility Act (RFA) (5 U.S.C. 601 *et seq.*), do not apply.

This action directly regulates growers, food processors, food handlers, and food retailers, not States or tribes, nor does this action alter the relationships or distribution of power and responsibilities established by Congress in the preemption provisions of FFDCA section 408(n)(4). As such, the Agency has determined that this action will not have a substantial direct effect on States or tribal governments, on the relationship between the national government and the States or tribal governments, or on the distribution of power and responsibilities among the various levels of government or between the Federal Government and Indian tribes. Thus, the Agency has determined that Executive Order 13132, entitled ''Federalism'' (64 FR 43255, August 10, 1999) and Executive Order 13175, entitled ''Consultation and Coordination with Indian Tribal Governments'' (65 FR 67249, November 9, 2000) do not apply to this action. In addition, this action does not impose any enforceable duty or contain any unfunded mandate as described under Title II of the Unfunded Mandates Reform Act (UMRA) (2 U.S.C. 1501 *et seq.*).

This action does not involve any technical standards that would require Agency consideration of voluntary consensus standards pursuant to section 12(d) of the National Technology Transfer and Advancement Act (NTTAA) (15 U.S.C. 272 note).

V. Congressional Review Act

Pursuant to the Congressional Review Act (5 U.S.C. 801 *et seq.*), EPA will submit a report containing this rule and other required information to the U.S. Senate, the U.S. House of Representatives, and the Comptroller General of the United States prior to publication of the rule in the **Federal Register**. This action is not a ''major rule'' as defined by 5 U.S.C. 804(2).

List of Subjects in 40 CFR Part 180

Environmental protection, Administrative practice and procedure, Agricultural commodities, Pesticides and pests, Reporting and recordkeeping requirements.

Dated: December 8, 2015.

Daniel J. Rosenblatt,

Acting Director, Registration Division, Office of Pesticide Programs.

Therefore, 40 CFR chapter I is amended as follows:

PART 180—[AMENDED]

■ 1. The authority citation for part 180 continues to read as follows:

Authority: 21 U.S.C. 321(q), 346a and 371.

■ 2. In § 180.245, revise the table in paragraph (b) to read as follows:

§ 180.245 Streptomycin; tolerances for residues.

* * * * *

(b) * * *

Commodity	Parts per million	Expiration/ revocation date
Grapefruit	0.15	12/31/2018
Grapefruit, dried pulp	0.40	12/31/2018

* * * * *

■ 3. In § 180.442, revise the table in paragraph (b) to read as follows:

§ 180.442 Bifenthrin; tolerances for residues.

* * * * *

(b) * * *

Commodity	Parts per million	Expiration/ revocation date
Apple	0.5	12/31/2018
Nectarine	0.5	12/31/2018
Peach	0.5	12/31/2018

* * * * *

■ 4. In § 180.472, revise the table in paragraph (b) to read as follows:

§ 180.472 Imidacloprid; tolerances for residues.

* * * * *

(b) * * *

Commodity	Parts per million	Expiration/ revocation date
Sugarcane, cane	6.0	12/31/2018
Sugarcane, molasses	50	12/31/2018

* * * * *

■ 5. In § 180.603, revise the table in paragraph (b) to read as follows:

§ 180.603 Dinotefuran; tolerances for residues.

* * * * *

(b) * * *

Commodity	Parts per million	Expiration/ revocation date
Fruit, pome, Group 11	2.0	12/31/2018
Fruit, stone, Group 12	2.0	12/31/2018

* * * * *

[FR Doc. 2015–31518 Filed 12–15–15; 8:45 am]

BILLING CODE 6560–50–P

ENVIRONMENTAL PROTECTION AGENCY

40 CFR Part 180

[EPA–HQ–OPP–2015–0023; FRL–9935–81]

Choline Chloride; Exemption From the Requirement of a Tolerance

AGENCY: Environmental Protection Agency (EPA).

ACTION: Final rule.

SUMMARY: This regulation establishes an exemption from the requirement of a tolerance for residues of the Choline Chloride (Acetyl Choline) in or on all food commodities when applied/used pre-harvest and used in accordance with label directions and good agricultural practices. CP Bio, Inc., submitted a petition to EPA under the Federal Food, Drug, and Cosmetic Act (FFDCA), requesting an exemption from the requirement of a tolerance. This regulation eliminates the need to establish a maximum permissible level for residues of Choline Chloride.

DATES: This regulation is effective December 16, 2015. Objections and requests for hearings must be received on or before February 16, 2016, and must be filed in accordance with the instructions provided in 40 CFR part 178 (see also Unit I.C. of the **SUPPLEMENTARY INFORMATION**).

ADDRESSES: The docket for this action, identified by docket identification (ID) number EPA–HQ–OPP–2015–0023, is available at *http://www.regulations.gov* or at the Office of Pesticide Programs Regulatory Public Docket (OPP Docket) in the Environmental Protection Agency Docket Center (EPA/DC), West William Jefferson Clinton Bldg., Rm. 3334, 1301 Constitution Ave. NW., Washington, DC 20460–0001. The Public Reading Room is open from 8:30 a.m. to 4:30 p.m., Monday through Friday, excluding legal holidays. The telephone number for the Public Reading Room is (202) 566–1744, and the telephone number for the OPP Docket is (703) 305–5805. Please review the visitor instructions and additional information about the docket available at *http://www.epa.gov/dockets.*

FOR FURTHER INFORMATION CONTACT: Robert McNally, Biopesticides and Pollution Prevention Division (7511P), Office of Pesticide Programs, Environmental Protection Agency, 1200 Pennsylvania Ave. NW., Washington, DC 20460–0001; main telephone number: (703) 305–7090; email address: *BPPDFRNotices@epa.gov.*

SUPPLEMENTARY INFORMATION:

I. General Information

A. Does this action apply to me?

You may be potentially affected by this action if you are an agricultural producer, food manufacturer, or pesticide manufacturer. The following list of North American Industrial Classification System (NAICS) codes is not intended to be exhaustive, but rather provides a guide to help readers determine whether this document applies to them. Potentially affected entities may include:

- Crop production (NAICS code 111).
- Animal production (NAICS code 112).
- Food manufacturing (NAICS code 311).
- Pesticide manufacturing (NAICS code 32532).

B. How can I get electronic access to other related information?

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C. How can I file an objection or hearing request?

Under FFDCA section 408(g), 21 U.S.C. 346a, any person may file an objection to any aspect of this regulation and may also request a hearing on those objections. You must file your objection or request a hearing on this regulation in accordance with the instructions provided in 40 CFR part 178. To ensure proper receipt by EPA, you must identify docket ID number EPA–HQ–OPP–2015–0023 in the subject line on the first page of your submission. All objections and requests for a hearing must be in writing, and must be received by the Hearing Clerk on or before February 16, 2016. Addresses for mail and hand delivery of objections and hearing requests are provided in 40 CFR 178.25(b).

In addition to filing an objection or hearing request with the Hearing Clerk as described in 40 CFR part 178, please submit a copy of the filing (excluding any Confidential Business Information (CBI)) for inclusion in the public docket. Information not marked confidential pursuant to 40 CFR part 2 may be disclosed publicly by EPA without prior notice. Submit the non-CBI copy of your objection or hearing request, identified by docket ID number EPA–HQ–OPP–2015–0023, by one of the following methods:

- *Federal eRulemaking Portal: http://www.regulations.gov.* Follow the online instructions for submitting comments. Do not submit electronically any information you consider to be CBI or other information whose disclosure is restricted by statute.
- *Mail:* OPP Docket, Environmental Protection Agency Docket Center (EPA/DC), (28221T), 1200 Pennsylvania Ave. NW., Washington, DC 20460–0001.
- *Hand Delivery:* To make special arrangements for hand delivery or delivery of boxed information, please follow the instructions at *http://www.epa.gov/dockets/contacts.html.* Additional instructions on commenting or visiting the docket, along with more information about dockets generally, is available at *http://www.epa.gov/dockets.*

II. Background and Statutory Findings

In the **Federal Register** of March 4, 2015 (80 FR 11611) (FRL–9922–68), EPA issued a document pursuant to FFDCA section 408(d)(3), 21 U.S.C. 346a(d)(3), announcing the filing of a pesticide tolerance petition (PP 4F8287) by CP Bio, Inc., 4802 Murrieta Street, Chino, CA 91710. The petition requested that 40 CFR part 180 be amended by establishing an exemption from the requirement of a tolerance for residues of Choline Chloride in or on all food commodities (when applied pre-harvest). That document referenced a summary of the petition prepared by the petitioner CP Bio, Inc., which is available in the docket, *http://www.regulations.gov.* There were no substantive comments received in response to the notice of filing.

Section 408(c)(2)(A)(i) of FFDCA allows EPA to establish an exemption from the requirement for a tolerance (the legal limit for a pesticide chemical residue in or on a food) only if EPA determines that the exemption is ''safe.'' Section 408(c)(2)(A)(ii) of FFDCA defines ''safe'' to mean that ''there is a reasonable certainty that no harm will result from aggregate exposure to the pesticide chemical residue, including all anticipated dietary exposures and all other exposures for which there is reliable information.'' This includes exposure through drinking water and in residential settings, but does not include occupational exposure. Pursuant to FFDCA section 408(c)(2)(B), in establishing or maintaining in effect an exemption from the requirement of a tolerance, EPA must take into account the factors set forth in FFDCA section 408(b)(2)(C), which require EPA to give special consideration to exposure of

infants and children to the pesticide chemical residue in establishing a tolerance and to ''ensure that there is a reasonable certainty that no harm will result to infants and children from aggregate exposure to the pesticide chemical residue.–. . . '' Additionally, FFDCA section 408(b)(2)(D) requires that the Agency consider ''available information concerning the cumulative effects of a particular pesticide's residues'' and ''other substances that have a common mechanism of toxicity.''

EPA performs a number of analyses to determine the risks from aggregate exposure to pesticide residues. First, EPA determines the toxicity of pesticides. Second, EPA examines exposure to the pesticide through food, drinking water, and through other exposures that occur as a result of pesticide use in residential settings.

III. Toxicological Profile

Consistent with FFDCA section 408(b)(2)(D), EPA has reviewed the available scientific data and other relevant information in support of this action and considered its validity, completeness and reliability, and the relationship of this information to human risk. EPA has also considered available information concerning the variability of the sensitivities of major identifiable subgroups of consumers, including infants and children.

A. Overview of Choline Chloride

Choline Chloride is an ammonium salt that readily dissociates into two constituents—Choline and Chloride. It presents as a white crystalline solid that is odorless. Each constituent is ubiquitous in the environment, constitutes a regular part of the human diet, and serves many critical functions in the human body. Choline is found in such foods as egg yolk, vegetables and animal fat. It is a precursor of a vital neurotransmitter; and it is critical for the structural integrity of cell membranes and various metabolic functions. Chloride is also a regular part of the human diet, particularly as a constituent of edible salt, and serves many functions in human biology. Chiefly, Chloride is an essential electrolyte responsible for maintaining acid/base balance, transmitting nerve impulses and regulating fluid in and out of cells.

Choline Chloride is already approved for use by EPA as an inert ingredient in pesticide products without numerical limitation for pre-harvest use (40 CFR 180.920). Additionally, Choline Chloride is designated as GRAS (Generally Recognized as Safe) and is approved by the Food and Drug Administration (FDA) as a human nutrient under 21 CFR 182.8252 and as a nutrient in animal feeds under 21 CFR 582.5252.

As a biopesticide, Choline Chloride is considered a plant growth regulator (PGR) intended for use to increase growth and decrease stress in growing crops. It has a non-toxic mode of action; and as with most PGRs, it is applied at low concentrations because use at high concentrations result in detrimental effects to the plant.

B. Biochemical Pesticide Toxicology Data Requirements

All applicable mammalian toxicology data requirements supporting the petition to establish an exemption from the requirement of a tolerance for the use of Choline Chloride as an active ingredient for use as a PGR on food crops have been fulfilled. All acute toxicology data requirements were fulfilled through guideline studies. The Acute Oral Toxicity Category is III; all other categories are IV. Additionally, the information submitted in support of the application indicate that Choline Chloride is non-mutagenic and that it is not subchronically or developmentally toxic. Subchronic oral toxicity, mutagenicity and developmental toxicity data requirements were satisfied through scientific literature. Subchronic dermal and inhalation requirements were waived for lack of exposure. (A complete assessment of the toxicology submission for Choline Chloride can be found in the docket.)

C. EPA's Safety Determination

EPA evaluated the available toxicity and exposure data on Choline Chloride and considered its validity, completeness, and reliability, as well as the relationship of this information to human risk. A full explanation of the data upon which EPA relied and its risk assessment based on that data can be found within the August 11, 2015, document entitled ''Federal Food, Drug, and Cosmetic Act (FFDCA) Considerations for Choline Chloride.'' This document, as well as other relevant information, is available in the docket for this action as described under **ADDRESSES**. Based upon its evaluation, EPA concludes that there is a reasonable certainty that no harm will result to the U.S. population, including infants and children, from aggregate exposure to residues of Choline Chloride. Therefore, an exemption from the requirement of a tolerance is established for residues of Choline Chloride in or on all food commodities when applied pre-harvest and used in accordance with label directions and good agricultural practices.

IV. Aggregate Exposures

In examining aggregate exposure, FFDCA section 408 directs EPA to consider available information concerning exposures from the pesticide residue in food and all other non-occupational exposures, including drinking water from ground water or surface water and exposure through pesticide use in gardens, lawns, or buildings (residential and other indoor uses).

A. Dietary Exposure

Food Exposure. Dietary exposure to the pesticidal residues of Choline Chloride is expected to be negligible. (1) Choline Chloride is a PGR and is necessarily applied at low concentrations. (High concentrations result in detrimental effects to the plant). (2) Choline Chloride biodegrades rapidly. A MITI–I test demonstrated that Choline Chloride is 93% degraded within 14 days. (3) As a salt, Choline Chloride dissociates readily when in contact with water, making its persistence as a residue even more unlikely.

Should exposure occur, however, minimal to no risk is expected for the general population, including infants and children. Notably, humans are already dietarily exposed to Choline Chloride. It is produced endogenously, and is found naturally in foods in the human diet. Indeed, it is considered an essential human dietary component, serving critical functions in nerve transmission, cell membrane integrity and lipid metabolism.

Drinking Water Exposure. No significant residues of Choline Chloride are expected in drinking water when products are used according to label instructions. The active ingredient is applied terrestrially at low concentrations; it is very soluble in water; and it biodegrades rapidly, once applied. As such, any residues of Choline Chloride in drinking water are anticipated to be negligible.

It should be additionally noted that both Choline and Chloride, the constituents of Choline Chloride, are ubiquitous in the environment; and there is a long history of incidental, but minor, exposure through drinking water.

B. Other Non-Occupational Exposure

Non-occupational exposure to Choline Chloride residues are not expected. Choline Chloride is not intended for use in residential settings; it is intended for agricultural use only.

Nonetheless, even in the event of incidental exposure, minimal to no risk is expected due to the low toxicity of the chemical as explained in the risk assessment found in the docket.

V. Cumulative Effects From Substances With a Common Mechanism of Toxicity

Section 408(b)(2)(D)(v) of FFDCA requires that, when considering whether to establish, modify, or revoke a tolerance, the Agency consider ''available information'' concerning the cumulative effects of a particular pesticide's residues and ''other substances that have a common mechanism of toxicity.''

EPA has not found Choline Chloride to share a common mechanism of toxicity with any other substances, and Choline Chloride does not appear to produce a toxic metabolite produced by other substances. For the purposes of this tolerance action, therefore, EPA has assumed that Choline Chloride does not have a common mechanism of toxicity with other substances. For information regarding EPA's efforts to determine which chemicals have a common mechanism of toxicity and to evaluate the cumulative effects of such chemicals, see EPA's Web site at *http://www.epa.gov/pesticides/cumulative.*

VI. Determination of Safety for U.S. Population, Infants and Children

FFDCA section 408(b)(2)(C) provides that, in considering the establishment of a tolerance or tolerance exemption for a pesticide chemical residue, the EPA shall assess the available information about consumption patterns among infants and children, special susceptibility of infants and children to pesticide chemical residues, and the cumulative effects on infants and children of the residues and other substances with a common mechanism of toxicity. In addition, FFDCA section 408(b)(2)(C) provides that the EPA shall apply an additional tenfold (10X) margin of safety for infants and children in the case of threshold effects to account for prenatal and postnatal toxicity and the completeness of the database on toxicity and exposure, unless the EPA determines that a different margin of safety will be safe for infants and children. This additional margin of safety is commonly referred to as the Food Quality Protection Act Safety Factor. In applying this provision, the EPA either retains the default value of 10X, or uses a different additional or no safety factor when reliable data are available to support a different additional or no safety factor.

Because there are no threshold effects associated with this biochemical, an additional margin of safety for infants and children is not necessary.

EPA has determined that there are no foreseeable dietary risks to the U.S. population, including infants and children, from the pesticidal use of Choline Chloride. Exposure to the residues of Choline Chloride is expected to be negligible due to the low concentrations associated with its use as a PGR, its high solubility and its rapid biodegradability. Moreover, any exposure to Choline Chloride residues are not expected to pose a risk. No toxic endpoints have been identified for Choline Chloride. There has been a long history of significant human dietary and endogenous exposure without documented incident. And the constituents of Choline Chloride are known to be readily metabolized.

VII. Other Considerations

A. Analytical Enforcement Methodology

An analytical method is not required for enforcement purposes since the Agency is establishing an exemption from the requirement of a tolerance without any numerical limitation.

B. International Residue Limits

In making its tolerance decisions, EPA seeks to harmonize U.S. tolerances with international standards whenever possible, consistent with U.S. food safety standards and agricultural practices. EPA considers the international maximum residue limits (MRLs) established by the Codex Alimentarius Commission (Codex), as required by FFDCA section 408(b)(4). The Codex Alimentarius is a joint United Nations Food and Agriculture Organization/World Health Organization food standards program, and it is recognized as an international food safety standards-setting organization in trade agreements to which the United States is a party. EPA may establish a tolerance that is different from a Codex MRL; however, FFDCA section 408(b)(4) requires that EPA explain the reasons for departing from the Codex level.

The Codex has not established a MRL for Choline Chloride.

VIII. Conclusions

Based on its assessment of Choline Chloride, EPA concludes that there is a reasonable certainty that no harm will result to the general population, or to infants and children, from aggregate exposure to Choline Chloride. EPA is therefore establishing an exemption from the requirement of a tolerance for residues of Choline Chloride in or on all food commodities when applied pre-harvest in accordance with label directions and good agricultural practices.

IX. Statutory and Executive Order Reviews

This action establishes a tolerance under FFDCA section 408(d) in response to a petition submitted to the Agency. The Office of Management and Budget (OMB) has exempted these types of actions from review under Executive Order 12866, entitled ''Regulatory Planning and Review'' (58 FR 51735, October 4, 1993). Because this action has been exempted from review under Executive Order 12866, this action is not subject to Executive Order 13211, entitled ''Actions Concerning Regulations That Significantly Affect Energy Supply, Distribution, or Use'' (66 FR 28355, May 22, 2001) or Executive Order 13045, entitled ''Protection of Children from Environmental Health Risks and Safety Risks'' (62 FR 19885, April 23, 1997). This action does not contain any information collections subject to OMB approval under the Paperwork Reduction Act (PRA), 44 U.S.C. 3501 *et seq.,* nor does it require any special considerations under Executive Order 12898, entitled ''Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations'' (59 FR 7629, February 16, 1994).

Since tolerances and exemptions that are established on the basis of a petition under FFDCA section 408(d), such as the tolerance in this final rule, do not require the issuance of a proposed rule, the requirements of the Regulatory Flexibility Act (RFA) (5 U.S.C. 601 *et seq.*), do not apply.

This action directly regulates growers, food processors, food handlers, and food retailers, not States or tribes, nor does this action alter the relationships or distribution of power and responsibilities established by Congress in the preemption provisions of FFDCA section 408(n)(4). As such, the Agency has determined that this action will not have a substantial direct effect on States or tribal governments, on the relationship between the national government and the States or tribal governments, or on the distribution of power and responsibilities among the various levels of government or between the Federal Government and Indian tribes. Thus, the Agency has determined that Executive Order 13132, entitled ''Federalism'' (64 FR 43255, August 10, 1999) and Executive Order 13175, entitled ''Consultation and Coordination with Indian Tribal Governments'' (65 FR 67249, November 9, 2000) do not apply

to this action. In addition, this action does not impose any enforceable duty or contain any unfunded mandate as described under Title II of the Unfunded Mandates Reform Act (UMRA) (2 U.S.C. 1501 *et seq.*).

This action does not involve any technical standards that would require Agency consideration of voluntary consensus standards pursuant to section 12(d) of the National Technology Transfer and Advancement Act (NTTAA) (15 U.S.C. 272 note).

X. Congressional Review Act

Pursuant to the Congressional Review Act (5 U.S.C. 801 *et seq.*), EPA will submit a report containing this rule and other required information to the U.S. Senate, the U.S. House of Representatives, and the Comptroller General of the United States prior to publication of the rule in the **Federal Register**. This action is not a ''major rule'' as defined by 5 U.S.C. 804(2).

List of Subjects in 40 CFR Part 180

Environmental protection, Administrative practice and procedure, Agricultural commodities, Pesticides and pests, Reporting and recordkeeping requirements.

Dated: December 1, 2015.

Jack E. Housenger,

Director, Office of Pesticide Programs.

Therefore, 40 CFR chapter I is amended as follows:

PART 180—[AMENDED]

■ 1. The authority citation for part 180 continues to read as follows:

Authority: 21 U.S.C. 321(q), 346a and 371.

■ 2. Add § 180.1334 to subpart D to read as follows:

§ 180.1334 Choline Chloride; Exemption from the Requirement of a Tolerance.

An exemption from the requirement of a tolerance is established for residues of Choline Chloride in or on all food commodities when Choline Chloride is applied pre-harvest and used in accordance with label directions and good agricultural practices.

[FR Doc. 2015–31464 Filed 12–15–15; 8:45 am]

BILLING CODE 6560–50–P

Proposed Rules

Federal Register
Vol. 80, No. 241
Wednesday, December 16, 2015

This section of the FEDERAL REGISTER contains notices to the public of the proposed issuance of rules and regulations. The purpose of these notices is to give interested persons an opportunity to participate in the rule making prior to the adoption of the final rules.

DEPARTMENT OF AGRICULTURE

Agricultural Marketing Service

7 CFR Part 205

[Document Number AMS–NOP–15–0052; NOP–15–12]

RIN 0581–AD39

National Organic Program (NOP); Sunset 2016 Amendments to the National List

AGENCY: Agricultural Marketing Service, USDA.

ACTION: Proposed rule.

SUMMARY: This proposed rule would address recommendations submitted to the Secretary of Agriculture (Secretary) by the National Organic Standards Board (NOSB) following their April 2015 meeting. These recommendations pertain to the 2016 Sunset Review of substances on the U.S. Department of Agriculture's (USDA) National List of Allowed and Prohibited Substances (National List). Consistent with the recommendations from the NOSB, this proposed rule would remove five non-organic nonagricultural substances from the National List for use in organic handling: Egg white lysozyme, cyclohexylamine, diethylaminoethanol, octadecylamine, and tetrasodium pyrophosphate.

DATES: Comments must be received by February 16, 2016.

ADDRESSES: Interested persons may comment on the proposed rule using the following procedures:

- *Federal eRulemaking Portal: http://www.regulations.gov.* Follow the instructions for submitting comments.
- *Mail:* Robert Pooler, Standards Division, National Organic Program, USDA–AMS–NOP, 1400 Independence Ave. SW., Room 2642–So., Ag Stop 0268, Washington, DC 20250–0268.

Instructions: All submissions received must include the docket number AMS–NOP–15–0052; NOP–15–12, and/or Regulatory Information Number (RIN) 0581–AD39 for this rulemaking. You should clearly indicate the topic and section number of this proposed rule to which your comment refers. You should clearly indicate whether you support the action being proposed for the substances in this proposed rule. You should clearly indicate the reason(s) for your position. You should also supply information on alternative management practices, where applicable, that support alternatives to the proposed action. You should also offer any recommended language change(s) that would be appropriate to your position. Please include relevant information and data to support your position (*e.g.* scientific, environmental, manufacturing, industry, impact information, etc.). Only relevant material supporting your position should be submitted. All comments received and any relevant background documents will be posted without change to *http://www.regulations.gov.*

Document: For access to the document and to read background documents or comments received, go to *http://www.regulations.gov.* Comments submitted in response to this proposed rule will also be available for viewing in person at USDA–AMS, National Organic Program, Room 2642–South Building, 1400 Independence Ave. SW., Washington, DC, from 9 a.m. to 12 noon and from 1 p.m. to 4 p.m., Monday through Friday (except official Federal holidays). Persons wanting to visit the USDA South Building to view comments received in response to this proposed rule are requested to make an appointment in advance by calling (202) 720–3252.

FOR FURTHER INFORMATION CONTACT: Robert Pooler, Standards Division, email: *bob.pooler@ams.usda.gov,* Telephone: (202) 720–3252; Fax: (202) 205–7808.

SUPPLEMENTARY INFORMATION:

I. Background

The National Organic Program (NOP) is authorized by the Organic Foods Production Act of 1990 (OFPA), as amended (7 U.S.C. 6501–6522). The USDA Agricultural Marketing Service (AMS) administers the NOP. Final regulations implementing the NOP, also referred to as the USDA organic regulations, were published December 21, 2000 (65 FR 80548), and became effective on October 21, 2002. Through these regulations, the AMS oversees national standards for the production, handling, and labeling of organically produced agricultural products. Since becoming effective, the USDA organic regulations have been frequently amended, mostly for changes to the National List in 7 CFR 205.601–205.606.

This National List identifies the synthetic substances that may be used and the nonsynthetic substances that may not be used in organic production. The National List also identifies synthetic, nonsynthetic nonagricultural, and nonorganic agricultural substances that may be used in organic handling. The OFPA and the USDA organic regulations, as indicated in § 205.105, specifically prohibit the use of any synthetic substance in organic production and handling unless the synthetic substance is on the National List. Section 205.105 also requires that any nonorganic agricultural substance and any nonsynthetic nonagricultural substance used in organic handling appear on the National List.

As stipulated by the OFPA, recommendations to propose amendment of the National List are developed by the NOSB, operating in accordance with the Federal Advisory Committee Act (5 U.S.C. App. 2 *et seq.*), to assist in the evaluation of substances to be used or not used in organic production and handling, and to advise the Secretary on the USDA organic regulations. The OFPA also requires a sunset review of all substances included on the National List within five years of their addition to or renewal on the list. If a listed substance is not reviewed by the NOSB and renewed by the USDA within the five year period, its allowance or prohibition on the National List is no longer in effect. Under the authority of the OFPA, the Secretary can amend the National List through rulemaking based upon proposed amendments recommended by the NOSB.

The NOSB's recommendations to continue existing exemptions and prohibitions include consideration of public comments and applicable supporting evidence that express a continued need for the use or prohibition of the substance(s) as required by the OFPA. Recommendations to either continue or discontinue an authorized exempted synthetic substance (7 U.S.C. 6517(c)(1))

are determined by the NOSB's evaluation of technical information, public comments, and supporting evidence that demonstrate that the substance is: (a) Harmful to human health or the environment; (b) no longer necessary for organic production due to the availability of alternative wholly nonsynthetic substitute products or practices; or (c) inconsistent with organic farming and handling practices.

In accordance with the sunset review process published in the **Federal Register** on September 16, 2013 (78 FR 61154), this proposed rule would amend the National List to reflect recommendations submitted to the Secretary by the NOSB on April 30, 2015, to amend the National List to remove five substances allowed as ingredients in or on processed products labeled as ''organic.'' The exemptions of each substance appearing on the National List for use in organic production and handling are evaluated by the NOSB using the evaluation criteria specified on the OFPA (7 U.S.C. 6517–6518).

II. Overview of Proposed Amendments

Nonrenewals

After considering public comments and supporting documents, the NOSB determined that one substance exemption on § 205.605(a) and four substance exemptions on § 205.605(b) of the National List are no longer necessary for organic handling. AMS has reviewed and proposes to accept the five NOSB recommendations for removal. Based upon these NOSB recommendations, this action proposes to amend the National List to remove the exemptions for egg white lysozyme, cyclohexylamine, diethylaminoethanol, octadecylamine, and tetrasodium pyrophosphate.

Egg White Lysozyme

The USDA organic regulations include an exemption on the National List for egg white lysozyme as an ingredient for use in organic processed products at § 205.605(a) as follows: Egg white lysozyme (CAS # 9001–63–2). In 2004, egg white lysozyme was petitioned for addition to § 205.605 because it was considered to be an essential processing aid/preservative for controlling bacteria that survived the pasteurization process of milk that is used for cheese manufacture. As recommended by the NOSB, egg white lysozyme was added to the National List on September 12, 2006 (71 FR 53299). As required by OFPA, the NOSB recommended the renewal of egg white lysozyme during their 2011 sunset review which was renewed by the Secretary on August 3, 2011 (76 FR 46595). The NOSB completed their most recent sunset review of the exemption of egg white lysozyme at their April 2015 meeting. Two notices of the public meetings on the 2016 sunset review with request for comments were published in **Federal Register** on September 8, 2014 (79 FR 53162) and on March 12, 2015 (80 FR 12975). Their purpose was to notify the public that the egg white lysozyme exemption discussed in this proposed rule would expire on September 12, 2016, if not reviewed by the NOSB and renewed by the Secretary. During their sunset review deliberation, the NOSB considered written comments received prior to and during the public meetings on all substance exemptions included in the 2016 sunset review. These written comments can be viewed at *http://www.regulations.gov* by searching for the document ID numbers: AMS–NOP–14–0063 (October 2014 public meeting) and AMS–NOP–15–0002 (April 2015 public meeting). The NOSB also considered oral comments received during these public meetings which are included in the meeting transcripts available on the NOP Web site at *http://www.ams.usda.gov/nop.* During their sunset review of egg white lysozyme the NOSB considered two technical reports on enzymes that were requested by and developed for the NOSB in 2011 and 2003, which are also available for review in the petitioned substance database on the NOP Web site.

The NOSB received no public comments supporting the continued need for the use of egg white lysozyme in organic processed products. Based upon the lack of public comments requesting the continued use of egg white lysozyme and supportive documents, the NOSB determined that the exemption for egg white lysozyme on the National List in § 205.605(a) is no longer necessary or essential for organic processed products. Subsequently, the NOSB recommended removal of egg white lysozyme from the National List at their April 2015 public meeting.

AMS accepts the NOSB's recommendation on removing egg white lysozyme from the National List. This proposed rule would amend § 205.605(a) by removing the substance exemption for egg white lysozyme. This amendment is proposed to be effective on egg white lysozyme's current sunset date, September 12, 2016.

Cyclohexylamine

The USDA organic regulations include an exemption on the National List for cyclohexylamine as a processing aid for use in processed products at § 205.605(b) as follows: Cyclohexylamine (CAS # 108–91–8)—for use only as a boiler water additive for packaging sterilization. In December 2000, cyclohexylamine was petitioned for addition to § 205.605 for use as a boiler water additive in steam production for food processing facilities. As recommended by the NOSB, cyclohexylamine was added to the National List on September 12, 2006 (71 FR 53299). As required by OFPA, the NOSB recommended the renewal of cyclohexylamine during their 2011 sunset review. The Secretary accepted the NOSB's recommendation and published a notice renewing the cyclohexylamine exemption on the National List on August 3, 2011 (76 FR 46595). Subsequently, the exemption for cyclohexylamine as included on the National List was considered during the NOSB's 2016 sunset review. Two notices of the NOSB's public meetings with request for comments were published in **Federal Register** on September 8, 2014 (79 FR 53162) and on March 12, 2015 (80 FR 12975). They notified the public that the cyclohexylamine exemption discussed in this proposed rule would expire on September 12, 2016, if not reviewed by the NOSB and renewed by the Secretary. During their 2016 sunset review deliberation, the NOSB considered written comments received prior to and during the public meetings on all substance exemptions included in the 2016 sunset review. These written comments can be viewed at *http://www.regulations.gov* by searching for the document ID numbers: AMS–NOP–14–0063 (October 2014 public meeting) and AMS–NOP–15–0002 (April 2015 public meeting). The NOSB also considered oral comments received during these public meetings which are included in the meeting transcripts available on the NOP Web site at *http://www.ams.usda.gov/nop.* During their 2016 sunset review, the NOSB considered a technical report on cyclohexylamine that was requested by and developed for the NOSB in 2001, which is available for review in the petitioned substance database on the NOP Web site.

Within the September 2014 and April 2015 meeting notices, the NOSB requested information on the continued use of cyclohexylamine as a boiler water additive. Public comment in response to these requests provided the NOSB with limited information in support of the continued need for the use of cyclohexylamine as a boiler water

additive in the production of organic processed products. As a result of the lack of support for the continued use of cyclohexylamine and the NOSB determination that the exemption for cyclohexylamine on § 205.605(b) is no longer necessary or essential for organic processed products, the NOSB recommended cyclohexylamine be removed from the National List at their April 2015 public meeting.

AMS accepts the NOSB's recommendation on removing cyclohexylamine from the National List. This proposed rule would amend § 205.605(b) by removing the substance exemption for cyclohexylamine. This amendment is proposed to be effective on cyclohexylamine's current sunset date, September 12, 2016.

Diethylaminoethanol

The USDA organic regulations include an exemption on the National List for diethylaminoethanol as a processing aid for use in organic processed products at § 205.605(b) as follows: Diethylaminoethanol (CAS # 100–37–8)—for use only as a boiler water additive for packaging sterilization. In December 2000, diethylaminoethanol was petitioned for addition onto § 205.605 for use as a boiler water additive in steam production for food processing facilities. As recommended by the NOSB, diethylaminoethanol was added to the National List on September 12, 2006 (71 FR 53299). As required by OFPA, the NOSB recommended the renewal of diethylaminoethanol during their 2011 sunset review. The Secretary accepted the NOSB's recommendation and published a notice renewing the diethylaminoethanol exemption on the National List on August 3, 2011 (76 FR 46595). Subsequently, the exemption for diethylaminoethanol was considered during the NOSB's 2016 sunset review. For the 2016 sunset review, two notices of the public meetings with request for comments were published in **Federal Register** on September 8, 2014 (79 FR 53162) and on March 12, 2015 (80 FR 12975). Their purpose was to notify the public that the diethylaminoethanol exemption discussed in this proposed rule would expire on September 12, 2016, if not reviewed by the NOSB and renewed by the Secretary. During their 2016 sunset review deliberation, the NOSB considered written comments received prior to and during the public meetings on all substance exemptions included in the 2016 sunset review. These written comments can be viewed at *http://www.regulations.gov* by searching for the document ID numbers: AMS–NOP–14–0063 (October 2014 public meeting) and AMS–NOP–15–0002 (April 2015 public meeting). The NOSB also considered oral comments received during these public meetings which are included in the meeting transcripts available on the NOP Web site at *http://www.ams.usda.gov/nop.* In addition, during their 2016 sunset review, the NOSB considered a technical report on diethylaminoethanol that was requested by and developed for the NOSB in 2001, which is available for review in the petitioned substance database on the NOP Web site.

Within the September 2014 and April 2015 public meeting notices, the NOSB requested information on the continued use of diethylaminoethanol as a boiler water additive. Public comment in response to these requests provided the NOSB with limited information in support of the continued need for the use of diethylaminoethanol as a boiler water additive in the production of organic processed products. As a result of the lack of support for the continued use of diethylaminoethanol and the NOSB determination that the exemption for diethylaminoethanol on § 205.605(b) is no longer necessary or essential for organic processed products, the NOSB recommended diethylaminoethanol be removed from the National List at their April 2015 meeting.

AMS accepts the NOSB's recommendation on removing diethylaminoethanol's exemption from the National List. This proposed rule would amend § 205.605(b) by removing the substance exemption for diethylaminoethanol. This amendment is proposed to be effective on diethylaminoethanol's current sunset date, September 12, 2016.

Octadecylamine

The USDA organic regulations include an exemption on the National List for octadecylamine as a processing aid for use in organic processed products at § 205.605(b) as follows: Octadecylamine (CAS # 124–30–1)—for use only as a boiler water additive for packaging sterilization. In December 2000, octadecylamine was petitioned for addition onto § 205.605 for use as a boiler water additive in the steam production for food processing facilities. As recommended by the NOSB, octadecylamine was added to the National List on September 12, 2006 (71 FR 53299). As required by OFPA, the NOSB recommended the renewal of octadecylamine during their 2011 sunset review. The Secretary accepted the NOSB's recommendation and published a notice renewing the octadecylamine exemption on the National List on August 3, 2011 (76 FR 46595). Subsequently, the exemption for octadecylamine was considered during the NOSB's 2016 sunset review. For the 2016 sunset review, two notices of the public meetings with request for comments were published in **Federal Register** on September 8, 2014 (79 FR 53162) and on March 12, 2015 (80 FR 12975). Their purpose was to notify the public that the octadecylamine exemption discussed in this proposed rule would expire on September 12, 2016, if not reviewed by the NOSB and renewed by the Secretary. During their 2016 sunset review deliberation, the NOSB considered written comments received prior to and during the public meetings on all substance exemptions included in the 2016 sunset review. These written comments can be viewed at *http://www.regulations.gov* by searching for the document ID numbers: AMS–NOP–14–0063 (October 2014 public meeting) and AMS–NOP–15–0002 (April 2015 public meeting). The NOSB also considered oral comments received during these public meetings which are included in the meeting transcripts available on the NOP Web site at *http://www.ams.usda.gov/nop.* In addition, during their 2016 sunset review, the NOSB considered a technical report on octadecylamine that was requested by and developed for the NOSB in 2001, which is available for review in the petitioned substance database on the NOP Web site.

Within the September 2014 and April 2015 public meeting notices, the NOSB requested information on the continued use of octadecylamine as a boiler water additive. Public comment in response to these requests provided the NOSB with limited information in support of the continued need for the use of octadecylamine as a boiler water additive in the production of organic processed products. As a result of the lack of support for the continued use of octadecylamine and the NOSB determination that the exemption for octadecylamine on § 205.605(b) is no longer necessary or essential for organic processed products, the NOSB recommended octadecylamine be removed from the National List.

AMS accepts the NOSB's recommendation on removing octadecylamine from the National List. This proposed rule would amend § 205.605(b) by removing the substance exemption for octadecylamine. This amendment is proposed to be effective on egg white lysozyme's current sunset date, September 12, 2016.

Tetrasodium pyrophosphate

The USDA organic regulations include an exemption on the National

List for tetrasodium pyrophosphate as an ingredient for use in organic processed products at § 205.605(b) as follows: Tetrasodium pyrophosphate (CAS # 7722–88–5)—for use only in meat analog products. In December 2001, tetrasodium pyrophosphate was petitioned for addition onto § 205.605 for use as an ingredient in organic food processing facilities. As recommended by the NOSB, tetrasodium pyrophosphate was added to the National List on September 12, 2006 (71 FR 53299). To implement OFPA requirements under the sunset process, the NOSB recommended the renewal of tetrasodium pyrophosphate during their 2011 sunset review. The Secretary accepted the NOSB's recommendation and published a notice renewing the tetrasodium pyrophosphate exemption on the National List on August 3, 2011 (76 FR 46595). Subsequently, the exemption for tetrasodium pyrophosphate was considered during the NOSB's 2016 sunset review. For the 2016 sunset review, two notices of the public meetings with request for comments were published in **Federal Register** on September 8, 2014 (79 FR 53162) and on March 12, 2015 (80 FR 12975). Their purpose was to notify the public that the tetrasodium pyrophosphate exemption discussed in this proposed rule would expire on September 12, 2016, if not reviewed by the NOSB and renewed by the Secretary. During their 2016 sunset review deliberation, the NOSB considered written comments received prior to and during the public meetings on all substance exemptions included in the 2016 sunset review. These written comments can be viewed at *http://www.regulations.gov* by searching for the document ID numbers: AMS–NOP–14–0063 (October 2014 public meeting) and AMS–NOP–15–0002 (April 2015 public meeting). The NOSB also considered oral comments received during these public meetings which are included in the meeting transcripts available on the NOP Web site at *http://www.ams.usda.gov/nop.* In addition, during their 2016 sunset review, the NOSB considered two technical reports on tetrasodium pyrophosphate that were requested by and developed for the NOSB in 2014 and 2002, which are available for review in the petitioned substance database on the NOP Web site.

Within the September 2014 and April 2015 meeting notices, the NOSB requested information on the continued use of tetrasodium pyrophosphate as an ingredient necessary for use in organic food processing. The NOSB review of public comment in response to these requests indicated a lack of support for the continued need for tetrasodium pyrophosphate used as an ingredient in the production of organic processed products. In addition, based upon information from the 2014 technical report, the NOSB also determined there are several alternatives to tetrasodium pyrophosphate that maybe more compatible with organic production. Since the received comments indicated a lack of support for the continued use of tetrasodium pyrophosphate and the NOSB's determination of more suitable alternatives, the NOSB determined that the exemption for tetrasodium pyrophosphate on § 205.605(b) is no longer necessary or essential for organic processed products and recommended that tetrasodium pyrophosphate be removed from the National List.

AMS accepts the NOSB's recommendation on removing tetrasodium pyrophosphate from the National List. This proposed rule would amend § 205.605(b) by removing the substance exemption for tetrasodium pyrophosphate. This amendment is proposed to be effective on tetrasodium pyrophosphate's current sunset date, September 12, 2016.

III. Related Documents

Two notices of public meetings with request for comments were published in **Federal Register** on September 8, 2014 (79 FR 53162) and on March 12, 2015 (80 FR 12975) in order to notify the public that the 2016 sunset review listings discussed in this proposed rule would expire on September 12, 2016, if not reviewed by the NOSB and renewed by the Secretary.

IV. Statutory and Regulatory Authority

OFPA, as amended (7 U.S.C. 6501–6522), authorizes the Secretary to make amendments to the National List based on proposed recommendations developed by the NOSB. Sections 6518(k)(2) and 6518(n) of OFPA authorize the NOSB to develop proposed amendments to the National List for submission to the Secretary and establish a petition process by which persons may petition the NOSB for the purpose of having substances evaluated for inclusion on or deletion from the National List. The National List petition process is implemented under § 205.607 of the USDA organic regulations. The current petition process was published on January 18, 2007 (72 FR 2167) and can be accessed through the NOP Web site at *http://www.ams.usda.gov/nop.* AMS published a revised sunset review process in the **Federal Register** on September 16, 2013 (78 FR 56811).

A. Executive Order 12866

This action has been determined to be not significant for purposes of Executive Order 12866, and therefore, has not been reviewed by the Office of Management and Budget.

B. Executive Order 12988

Executive Order 12988 instructs each executive agency to adhere to certain requirements in the development of new and revised regulations in order to avoid unduly burdening the court system. This proposed rule is not intended to have a retroactive effect.

States and local jurisdictions are preempted under OFPA from creating programs of accreditation for private persons or State officials who want to become certifying agents of organic farms or handling operations. A governing State official would have to apply to USDA to be accredited as a certifying agent, as described in section 2115(b) of OFPA (7 U.S.C. 6514(b)). States are also preempted under section 2104 through 2108 of OFPA (7 U.S.C. 6503 through 6507) from creating certification programs to certify organic farms or handling operations unless the State programs have been submitted to, and approved by, the Secretary as meeting the requirements of OFPA.

Pursuant to section 2108(b)(2) of OFPA (7 U.S.C. 6507(b)(2)), a State organic certification program may contain additional requirements for the production and handling of organically produced agricultural products that are produced in the State and for the certification of organic farm and handling operations located within the State under certain circumstances. Such additional requirements must: (a) Further the purposes of OFPA, (b) not be inconsistent with OFPA, (c) not be discriminatory toward agricultural commodities organically produced in other States, and (d) not be effective until approved by the Secretary.

Pursuant to section 2120(f) of OFPA (7 U.S.C. 6519(f)), this proposed rule would not alter the authority of the Secretary under the Federal Meat Inspection Act (21 U.S.C. 601–624), the Poultry Products Inspection Act (21 U.S.C. 451–471), or the Egg Products Inspection Act (21 U.S.C. 1031–1056), concerning meat, poultry, and egg products, nor any of the authorities of the Secretary of Health and Human Services under the Federal Food, Drug and Cosmetic Act (21 U.S.C. 301–399), nor the authority of the Administrator of EPA under the Federal Insecticide, Fungicide, and Rodenticide Act (7 U.S.C. 136–136(y)).

Section 2121 of OFPA (7 U.S.C. 6520) provides for the Secretary to establish

an expedited administrative appeals procedure under which persons may appeal an action of the Secretary, the applicable governing State official, or a certifying agent under this title that adversely affects such person or is inconsistent with the organic certification program established under this title. OFPA also provides that the U.S. District Court for the district in which a person is located has jurisdiction to review the Secretary's decision.

C. Regulatory Flexibility Act

The Regulatory Flexibility Act (RFA) (5 U.S.C. 601–612) requires agencies to consider the economic impact of each rule on small entities and evaluate alternatives that would accomplish the objectives of the rule without unduly burdening small entities or erecting barriers that would restrict their ability to compete in the market. The purpose of the RFA is to fit regulatory actions to the scale of businesses subject to the action. Section 605 of the RFA allows an agency to certify a rule, in lieu of preparing an analysis, if the rulemaking is not expected to have a significant economic impact on a substantial number of small entities.

Pursuant to the requirements set forth in the RFA, AMS performed an economic impact analysis on small entities in the final rule published in the **Federal Register** on December 21, 2000 (65 FR 80548). AMS has also considered the economic impact of this action on small entities. The impact on entities affected by this proposed rule would not be significant. The effect of this proposed rule would be to prohibit the use of five non-organic non-agricultural substances that have limited public support and may no longer be used since non-organic non-agricultural alternatives to these substances may have been developed and implemented by food processors. AMS concludes that the economic impact of removing the nonorganic nonagricultural substance, egg white lysozyme, c*yclohexylamine,* diethylaminoethanol, octadecylamine, and tetrasodium pyrophosphate would be minimal to small agricultural firms since alternative non-agricultural products may be commercially available. As such, these substances are proposed to be removed from the National List under this rule. Accordingly, AMS certifies that this rule will not have a significant economic impact on a substantial number of small entities.

Small agricultural service firms, which include producers, handlers, and accredited certifying agents, have been defined by the Small Business Administration (SBA) (13 CFR 121.201) as those having annual receipts of less than $7,000,000 and small agricultural producers are defined as those having annual receipts of less than $750,000.

According to USDA, National Agricultural Statistics Service (NASS), certified organic acreage exceeded 3.5 million acres in 2011.[1] According to NOP's Accreditation and International Activities Division, the number of certified U.S. organic crop and livestock operations totaled over 19,470 in 2014. The list of certified operations is available on the NOP Web site at *http://apps.ams.usda.gov/nop/.* AMS believes that most of these entities would be considered small entities under the criteria established by the SBA. U.S. sales of organic food and non-food have grown from $1 billion in 1990 to $39.1 billion in 2014, an 11.3 percent growth over 2013 sales.[2] In addition, the USDA has 80 accredited certifying agents who provide certification services to producers and handlers. A complete list of names and addresses of accredited certifying agents may be found on the AMS NOP Web site, at *http://www.ams.usda.gov/nop.* AMS believes that most of these accredited certifying agents would be considered small entities under the criteria established by the SBA. Certifying agents reported 27,810 certified operations worldwide in 2014.

D. Paperwork Reduction Act

No additional collection or recordkeeping requirements are imposed on the public by this proposed rule. Accordingly, OMB clearance is not required by section 350(h) of the Paperwork Reduction Act of 1995, 44 U.S.C. 3501, Chapter 35, or OMB's implementing regulations at 5 CFR part 1320.

E. Executive Order 13175

This proposed rule has been reviewed in accordance with the requirements of Executive Order 13175, Consultation and Coordination with Indian Tribal Governments. The review reveals that this regulation will not have substantial and direct effects on Tribal governments and will not have significant Tribal implications.

F. General Notice of Public Rulemaking

This proposed rule reflects recommendations submitted to the Secretary by the NOSB for substances on the National List of Allowed and Prohibited Substances that, under the Sunset review provisions of OFPA, would otherwise expire on September 12, 2016. A 60-day period for interested persons to comment on this rule is provided. Sixty days is deemed appropriate because the review of these listings was widely publicized through two NOSB meeting notices; the use or prohibition of these substances, as applicable, are critical to organic production and handling; and this rulemaking must be completed before the sunset date of September 12, 2016.

List of Subjects in 7 CFR Part 205

Administrative practice and procedure, Agriculture, Animals, Archives and records, Imports, Labeling, Organically produced products, Plants, Reporting and recordkeeping requirements, Seals and insignia, Soil conservation.

For the reasons set forth in the preamble, 7 CFR part 205 is proposed to be amended as follows:

PART 205—NATIONAL ORGANIC PROGRAM

■ 1. The authority citation for 7 CFR part 205 continues to read as follows:

Authority: 7 U.S.C. 6501–6522.

§ 205.605 [Amended]

■ 2. In § 205.605:

■ a. Paragraph (a) is amended by removing the following substance: Egg white lysozyme (CAS # 9001–63–2).

■ b. Paragraph (b) is amended by removing the following four substances: Cyclohexylamine (CAS # 108–91–8)—for use only as a boiler water additive for packaging sterilization; Diethylaminoethanol (CAS # 100–37–8)—for use only as a boiler water additive for packaging sterilization; Octadecylamine (CAS # 124–30–1)—for use only as a boiler water additive for packaging sterilization; and Tetrasodium pyrophosphate (CAS # 7722–88–5)—for use only in meat analog products.

Dated: December 8, 2015.

Rex A. Barnes,

Associate Administrator, Agricultural Marketing Service.

[FR Doc. 2015–31380 Filed 12–15–15; 8:45 am]

BILLING CODE 3410–02–P

[1] U.S. Department of Agriculture, National Agricultural Statistics Service. October 2012. 2011 Certified Organic Productions Survey.

[2] Organic Trade Association. 2014. Organic Industry Survey. *www.ota.com.*

DEPARTMENT OF COMMERCE

Patent and Trademark Office

37 CFR Part 11

[Docket No.: PTO–C–2015–0018]

RIN 0651–AC99

USPTO Law School Clinic Certification Program

AGENCY: United States Patent and Trademark Office, Commerce.

ACTION: Notice of proposed rulemaking.

SUMMARY: This rulemaking is required by a Public Law enacted on December 16, 2014. This law requires the United States Patent and Trademark Office (''Office'' or ''USPTO'') Director to establish regulations and procedures for application to and participation in the USPTO Law School Clinic Certification Program. This law removed the ''pilot'' status of the USPTO's existing law school clinic certification program. The program allows students enrolled in a participating law school's clinic to practice patent and trademark law before the USPTO under the direct supervision of a faculty clinic supervisor by drafting, filing, and prosecuting patent or trademark applications, or both, on a pro bono basis for clients who qualify for assistance from the law school's clinic. In this way, these student practitioners gain valuable experience drafting, filing, and prosecuting patent and trademark applications that would otherwise be unavailable to students while in law school. The program also facilitates the provision of pro bono services to trademark and patent applicants who lack the financial resources to pay for legal representation. The proposed rules incorporate the requirements and procedures developed and implemented during the pilot phase of the program.

DATES: To be ensured of consideration, written comments must be received on or before February 16, 2016.

ADDRESSES: Comments should be sent by electronic mail message over the Internet addressed to: *LSCCPComments@uspto.gov.* Comments may also be submitted by mail addressed to: Mail Stop OED—Law School Rules, United States Patent and Trademark Office, P.O. Box 1450, Alexandria, Virginia 22313–1450, marked to the attention of William R. Covey, Deputy General Counsel for Enrollment and Discipline and Director of the Office of Enrollment and Discipline.

Comments may also be sent by electronic mail message over the Internet via the Federal eRulemaking Portal. See the Federal eRulemaking Portal Web site (*http://www.regulations.gov*) for additional instructions on providing comments via the Federal eRulemaking Portal.

Although comments may be submitted by postal mail, the Office prefers to receive comments by electronic mail message over the Internet because sharing comments with the public is more easily accomplished. Electronic comments are preferred to be submitted in plain text, but also may be submitted in ADOBE® portable document format or MICROSOFT WORD® format. Comments not submitted electronically should be submitted on paper in a format that facilitates convenient digital scanning into ADOBE® portable document format.

Comments will be made available for public inspection at the Office of Enrollment and Discipline, located on the 8th Floor of the Madison West Building, 600 Dulany Street, Alexandria, Virginia. Comments also will be available for viewing via the Office's Internet Web site (*http://www.uspto.gov*). Because comments will be made available for public inspection, information that the submitter does not desire to make public, such as an address or phone number, should not be included in the comments.

FOR FURTHER INFORMATION CONTACT: William R. Covey, Deputy General Counsel for Enrollment and Discipline and Director of the Office of Enrollment and Discipline, by telephone at 571–272–4097.

SUPPLEMENTARY INFORMATION:

Executive Summary

A. Purpose of the Regulatory Action

The proposed changes to part 11 aim to comply with the rulemaking requirement imposed by Public Law 113–227 (Dec. 16, 2014). This law requires the USPTO Director to establish regulations and procedures for application to and participation in the USPTO Law School Clinic Certification Program. This law removed the ''pilot'' status of the USPTO's law school clinic certification program. The program allows students enrolled in a participating law school's clinic to practice patent and trademark law before the USPTO by drafting, filing, and prosecuting patent or trademark applications, or both, on a pro bono basis for clients that qualify for assistance from the law school's clinic. The program provides law students enrolled in a participating clinic the opportunity to practice patent and trademark law before the USPTO under the direct supervision of a faculty clinic supervisor. In this way, these student practitioners gain valuable experience drafting, filing, and prosecuting patent and trademark applications that would otherwise be unavailable to students while in law school. The program also facilitates the provision of pro bono services to trademark and patent applicants that lack the financial resources to pay for legal representation. The proposed rules incorporate the requirements and procedures developed and implemented during the pilot phase of the program.

B. Summary of the Major Provisions of the Regulatory Action in Question

This NPRM proposes rules in 37 CFR 11.16 and 11.17 to formalize the process by which law schools, law school faculty, and law school students may participate in the USPTO Law School Clinic Certification Program.

Discussion of Specific Rules

The USPTO proposes to amend § 11.1 to clarify the definition of ''*attorney*'' or ''*lawyer*'' to reflect the current practice of requiring attorneys to be active members, in good standing, of the highest court of any State, and otherwise eligible to practice law. The term ''State'' is elsewhere defined in § 11.1 to mean any of the 50 states of the United States of America, the District of Columbia, and any Commonwealth or territory of the United States of America.

The USPTO also proposes to amend the term ''*practitioner*'' to specifically include those students allowed to participate in the USPTO Law School Clinic Certification Program. The mechanism by which such students are allowed to participate is through a grant of limited recognition. Once granted limited recognition, such students are deemed practitioners and, as such, are subject to the USPTO Rules of Professional Conduct. By definition, only ''practitioners'' may represent others before the office. Law school students who are not participating in the USPTO Law School Clinic Certification Program may not practice before the USPTO, unless otherwise authorized to do so.

The USPTO proposes to add §§ 11.16 and 11.17, currently reserved, to establish the regulatory framework for the Law School Clinic Certification Program.

Section 11.16 would establish the criteria for admission to, and continuing participation in, the USPTO Law School Clinic Certification Program, the qualifications necessary for approval as

a Faculty Clinic Supervisor, and the requirements for granting limited recognition to law school students. Schools participating in the program as of the date the final rule is published will not be required to reapply for admission but must apply for renewal at such time as the OED Director establishes. These criteria, deadlines for admission, and any ancillary requirements, will be published in a bulletin on the Office of Enrollment and Discipline's law school clinic Web page.

Section 11.16(a) would describe the purpose of the program.

Section 11.16(b) would establish rules regarding applying for, and renewing, admission to the program. Law schools enrolled in the program on the effective date of these rules would be grandfathered into the program and would not be required to submit a new application. Law schools no longer participating in the program on the effective date, however, would be required to reapply for admission. Although not required to reapply for admission, participating law schools seeking to add a practice area (*i.e.,* patents or trademarks) would be required to submit an application for such practice area. This section would establish that all law schools would be required to submit a renewal application on a biennial basis.

Section 11.16(c) would specify that Faculty Clinic Supervisors are subject to the USPTO Rules of Professional Conduct, including those governing supervisory practitioners. *See e.g.,* 37 CFR 11.501 and 11.502. As such, Faculty Clinic Supervisors, as well as the respective law school deans, are responsible for ensuring their schools have established a process that identifies conflicts of interest.

Generally, the OED Director makes a determination regarding a proposed Faculty Clinic Supervisor's eligibility as part of the process of considering a law school's application for admission to the program. The OED Director may also make a determination whether to approve an additional, or a replacement, supervisor for one or more schools that have already been admitted to the program. In determining whether a Faculty Clinic Supervisor candidate possesses the number of years of experience required by paragraphs (c)(1)(ii) and (c)(2)(ii), the OED Director will measure the duration of experience from the date of the candidate's request for approval. Any additional criteria established by the OED Director, as set forth in paragraphs (c)(1)(v) and (c)(2)(v), will be published in a bulletin on the Office of Enrollment and Discipline's law school clinic Web page.

Each practice area must be led by a fully-qualified, USPTO-approved, Faculty Clinic Supervisor for that practice area. Provided that they are approved by the USPTO, a law school's clinic may include a patent practice, a trademark practice, or both. The USPTO does not have a preference whether a law school includes both practice areas in one clinic or separates each discipline into its own clinic. For law school clinics approved to practice in both the patent and trademark practice areas, the USPTO may approve one individual to serve as a Faculty Clinic Supervisor for both practice areas, provided that the individual satisfies the USPTO's criteria to be both a Patent Faculty Clinic Supervisor and a Trademark Faculty Clinic Supervisor.

Section 11.16(d) would provide the rules for providing limited recognition to students for the purpose of practicing before the USPTO. It would provide that registered patent agents, and attorneys enrolled in a Master of Laws (L.L.M.) program, who wish to participate in a clinic must abide by the same rules and procedures as other students in the program.

Section 11.17 would establish rules concerning the continuing obligations of schools participating in the USPTO Law School Clinic Certification Program and specify those circumstances that may result in inactivation or removal of a school from the program.

Section 11.17(a) would restate the requirement in Public Law 113–227 that services rendered under the program will be provided on a pro-bono basis.

Section 11.17(b) would establish procedures for law schools to report their program activities to the USPTO.

Section 11.17(c) would establish procedures for inactivating a law school clinic. Inactive law schools are still considered by the USPTO to be ''participating'' in the program.

Section 11.17(d) would establish procedures for removing a law school from the program and would explain the obligations of student practitioners in such event.

Rulemaking Considerations

Administrative Procedure Act: The changes in this proposed rulemaking involve rules of agency practice and procedure, and/or interpretive rules. *See Perez* v. *Mortg. Bankers Ass'n,* 135 S. Ct. 1199, 1204 (2015) (interpretive rules ''advise the public of the agency's construction of the statutes and rules which it administers'') (citation and internal quotation marks omitted); *Nat'l Org. of Veterans' Advocates* v. *Sec'y of Veterans Affairs,* 260 F.3d 1365, 1375 (Fed. Cir. 2001) (rule that clarifies interpretation of a statute is interpretive); *Bachow Commc'ns Inc.* v. *FCC,* 237 F.3d 683, 690 (D.C. Cir. 2001) (rules governing an application process are procedural under the Administrative Procedure Act); *Inova Alexandria Hosp.* v. *Shalala,* 244 F.3d 342, 350 (4th Cir. 2001) (rules for handling appeals were procedural where they did not change the substantive standard for reviewing claims).

Accordingly, prior notice and opportunity for public comment for the changes in this proposed rulemaking are not required pursuant to 5 U.S.C. 553(b) or (c), or any other law. *See Perez,* 135 S. Ct. at 1206 (notice-and-comment procedures are required neither when an agency ''issue[s] an initial interpretive rule'' nor ''when it amends or repeals that interpretive rule''); *Cooper Techs. Co.* v. *Dudas,* 536 F.3d 1330, 1336–37 (Fed. Cir. 2008) (stating that 5 U.S.C. 553, and thus 35 U.S.C. 2(b)(2)(B), does not require notice and comment rulemaking for ''interpretative rules, general statements of policy, or rules of agency organization, procedure, or practice,'' quoting 5 U.S.C. 553(b)(A)). The USPTO, however, is publishing these proposed rule changes for comment as it seeks the benefit of the public's views.

Regulatory Flexibility Act: The Deputy General Counsel, United States Patent and Trademark Office, has certified to the Chief Counsel for Advocacy, Small Business Administration, that the proposed changes in this rulemaking will not have a significant economic impact on a substantial number of small entities (Regulatory Flexibility Act, 5 U.S.C. 605(b)). The USPTO Law School Clinic Certification Program is voluntary. Law schools, clinics, and clients may elect whether to participate in the program, and receive the benefits thereof. The primary effect of this rulemaking is not economic, but simply to formalize the requirements and procedures developed and implemented during the pilot phase of the program. The rulemaking proposes certain basic quarterly reporting requirements by participating law school clinics in order to provide information to the Office pertaining to the quality and use of their pro bono services. The information required for the report should be readily available to participating law school clinics and present a minimal administrative burden. Additionally, the Office currently has 47 participating law school clinics, and it is expected that this number may increase slightly. Accordingly, this reporting requirement and the rulemaking will not have a significant economic impact on a substantial number of small entities.

Executive Order 12866 (Regulatory Planning and Review): This rulemaking has been determined to be not significant for purposes of Executive Order 12866 (September 30, 1993).

Executive Order 13563 (Improving Regulation and Regulatory Review): The Office has complied with Executive Order 13563. Specifically, the Office has, to the extent feasible and applicable: (1) Made a reasoned determination that the benefits justify the costs of the rule; (2) tailored the rule to impose the least burden on society consistent with obtaining the regulatory objectives; (3) selected a regulatory approach that maximizes net benefits; (4) specified performance objectives; (5) identified and assessed available alternatives; (6) involved the public in an open exchange of information and perspectives among experts in relevant disciplines, affected stakeholders in the private sector and the public as a whole, and provided on-line access to the rulemaking docket; (7) attempted to promote coordination, simplification, and harmonization across government agencies and identified goals designed to promote innovation; (8) considered approaches that reduce burdens and maintain flexibility and freedom of choice for the public; and (9) ensured the objectivity of scientific and technological information and processes.

Executive Order 13132: This rulemaking does not contain policies with federalism implications sufficient to warrant preparation of a Federalism Assessment under Executive Order 13132 (August 4, 1999).

Executive Order 13175 (Tribal Consultation): This rulemaking will not: (1) have substantial direct effects on one or more Indian tribes; (2) impose substantial direct compliance costs on Indian tribal governments; or (3) preempt tribal law. Therefore, a tribal summary impact statement is not required under Executive Order 13175 (Nov. 6, 2000).

Executive Order 13211 (Energy Effects): This rulemaking is not a significant energy action under Executive Order 13211 because this rulemaking is not likely to have a significant adverse effect on the supply, distribution, or use of energy. Therefore, a Statement of Energy Effects is not required under Executive Order 13211 (May 18, 2001).

Executive Order 12988 (Civil Justice Reform): This rulemaking meets applicable standards to minimize litigation, eliminate ambiguity, and reduce burden as set forth in sections 3(a) and 3(b)(2) of Executive Order 12988 (Feb. 5, 1996).

Executive Order 13045 (Protection of Children): This rulemaking does not concern an environmental risk to health or safety that may disproportionately affect children under Executive Order 13045 (Apr. 21, 1997).

Executive Order 12630 (Taking of Private Property): This rulemaking will not effect a taking of private property or otherwise have taking implications under Executive Order 12630 (Mar. 15, 1988).

Congressional Review Act: Under the Congressional Review Act provisions of the Small Business Regulatory Enforcement Fairness Act of 1996 (5 U.S.C. 801 *et seq.*), prior to issuing any final rule, the United States Patent and Trademark Office will submit a report containing the final rule and other required information to the U.S. Senate, the U.S. House of Representatives, and the Comptroller General of the Government Accountability Office. The changes in this notice are not expected to result in an annual effect on the economy of 100 million dollars or more, a major increase in costs or prices, or significant adverse effects on competition, employment, investment, productivity, innovation, or the ability of United States-based enterprises to compete with foreign-based enterprises in domestic and export markets. Therefore, this notice is not expected to result in a ''major rule'' as defined in 5 U.S.C. 804(2).

Unfunded Mandates Reform Act of 1995: The changes in this rulemaking do not involve a Federal intergovernmental mandate that will result in the expenditure by State, local, and tribal governments, in the aggregate, of 100 million dollars (as adjusted) or more in any one year, or a Federal private sector mandate that will result in the expenditure by the private sector of 100 million dollars (as adjusted) or more in any one year, and will not significantly or uniquely affect small governments. Therefore, no actions are necessary under the provisions of the Unfunded Mandates Reform Act of 1995. *See* 2 U.S.C. 1501 *et seq.*

National Environmental Policy Act: This rulemaking will not have any effect on the quality of environment and is thus categorically excluded from review under the National Environmental Policy Act of 1969. *See* 42 U.S.C. 4321 *et seq.*

National Technology Transfer and Advancement Act: The requirements of section 12(d) of the National Technology Transfer and Advancement Act of 1995 (15 U.S.C. 272 note) are not applicable because this rulemaking does not contain provisions which involve the use of technical standards.

Paperwork Reduction Act: The Paperwork Reduction Act of 1995 (44 U.S.C. 3501 *et seq.*) requires that the Office consider the impact of paperwork and other information collection burdens imposed on the public. This rulemaking involves information collection requirements which are subject to review by the Office of Management and Budget (OMB) under the Paperwork Reduction Act of 1995 (44 U.S.C. 3501–3549). New information will be collected and a new information collection request to authorize the collection of new information involved in this notice is being submitted to OMB under the title ''Law School Clinic Certification Program.'' The proposed collection will be available at the OMB's Information Collection Review Web site (*www.reginfo.gov/public/do/PRAMain*).

In addition to the new items, this rulemaking action also seeks to associate the following item currently in a different OMB approved collection (0651–0012 Admission to Practice) with this proposed collection: Application by Student to Become a Participant in the Program (PTO–158LS). This transfer will consolidate all information collections relating to law student involvement in the Law School Clinic Certification Program into a single collection.

Notwithstanding any other provision of law, no person is required to respond to, nor shall any person be subject to a penalty, for failure to comply with a collection of information subject to the requirements of the Paperwork Reduction Act unless that collection of information displays a currently valid OMB control number.

List of Subjects in 37 CFR Part 11

Administrative practice and procedure, Inventions and patents, Lawyers, Reporting and recordkeeping requirements.

For the reasons set forth in the preamble, the United States Patent and Trademark Office proposes to amend 37 CFR part 11 as follows:

PART 11—REPRESENTATION OF OTHERS BEFORE THE UNITED STATES PATENT AND TRADEMARK OFFICE

■ 1. The authority citation for part 11 is revised to read as follows:

Authority: 5 U.S.C. 500; 15 U.S.C. 1123; 35 U.S.C. 2(b)(2), 32, 41; Sec. 1, Pub. L. 113–227, 128 Stat. 2114.

■ 2. In § 11.1, the definitions of ''*Attorney* or *lawyer*'' and ''*Practitioner*'' are revised to read as follows:

§ 11.1 Definitions.

* * * * *

Attorney or *lawyer* means an individual who is an active member in good standing of the bar of the highest court of any State. A *non-lawyer* means a person who is not an attorney or lawyer.

* * * * *

Practitioner means:

(1) An attorney or agent registered to practice before the Office in patent matters;

(2) An individual authorized under 5 U.S.C. 500(b), or otherwise as provided by § 11.14(a), (b), and (c), to practice before the Office in trademark matters or other non-patent matters;

(3) An individual authorized to practice before the Office in a patent case or matters under § 11.9(a) or (b); or

(4) An individual authorized to practice before the Office under § 11.16(d).

* * * * *

■ 3. Add § 11.16 to read as follows:

§ 11.16 Requirements for admission to the USPTO Law School Clinic Certification Program.

(a) The USPTO Law School Clinic Certification Program allows students enrolled in a participating law school's clinic to practice before the Office in patent or trademark matters by drafting, filing, and prosecuting patent or trademark applications on a pro bono basis for clients that qualify for assistance from the law school's clinic. All law schools accredited by the American Bar Association are eligible for participation in the program, and shall be examined for acceptance using identical criteria.

(b) *Application for admission and renewal.* (1) *Application for admission.* Non-participating law schools seeking admission to the USPTO Law School Clinic Certification Program, and participating law schools seeking to add a practice area, shall submit an application for admission for such practice area to the Office of Enrollment and Discipline in accordance with criteria and time periods set forth by the OED Director.

(2) *Renewal application.* Each participating law school desiring to continue in the USPTO Law School Clinic Certification Program shall, biennially from a date assigned to the law school by the OED Director, submit a renewal application to the Office of Enrollment and Discipline in accordance with criteria set forth by the OED Director.

(3) The OED Director may refuse admission or renewal of a law school to the USPTO Law School Clinic Certification Program if the OED Director determines that admission, or renewal, of the law school would fail to provide significant benefit to the public or the law students participating in the law school's clinic.

(c) *Faculty Clinic Supervisor.* Any law school seeking admission to or participating in the USPTO Law School Clinic Certification Program must have at least one Faculty Clinic Supervisor for the patent practice area, if the clinic includes patent practice; and at least one Faculty Clinic Supervisor for the trademark practice area, if the clinic includes trademark practice.

(1) *Patent Faculty Clinic Supervisor.* A Faculty Clinic Supervisor for a law school clinic's patent practice must:

(i) Be a registered patent practitioner in active status and good standing with the Office of Enrollment and Discipline;

(ii) Demonstrate at least 3 years experience in prosecuting patent applications before the Office within the 5 years immediately prior to the request for approval as a Faculty Clinic Supervisor;

(iii) Assume full responsibility for the instruction and guidance of law students participating in the law school clinic's patent practice;

(iv) Assume full responsibility for all patent applications and legal services, including filings with the Office, produced by the clinic; and

(v) Comply with all additional criteria established by the OED Director.

(2) *Trademark Faculty Clinic Supervisor.* A Faculty Clinic Supervisor for a law school clinic's trademark practice must:

(i) Be an attorney as defined in § 11.1;

(ii) Demonstrate at least 3 years experience in prosecuting trademark applications before the Office within the 5 years immediately prior to the date of the request for approval as a Faculty Clinic Supervisor;

(iii) Assume full responsibility for the instruction, guidance, and supervision of law students participating in the law school clinic's trademark practice;

(iv) Assume full responsibility for all trademark applications and legal services, including filings with the Office, produced by the clinic; and

(v) Comply with all additional criteria established by the OED Director.

(3) A Faculty Clinic Supervisor under paragraph (c) of this section must submit a statement:

(i) Assuming responsibility for performing conflicts checks for each law student and client in the relevant clinic practice area;

(ii) Assuming responsibility for student instruction and work, including instructing, mentoring, overseeing, and supervising all participating law school students in the clinic's relevant practice area;

(iii) Assuming responsibility for content and timeliness of all applications and documents submitted to the Office through the relevant practice area of the clinic;

(iv) Assuming responsibility for all communications by clinic students to clinic clients in the relevant clinic practice area;

(v) Assuming responsibility for ensuring that there is no gap in representation of clinic clients in the relevant practice area during student turnover, school schedule variations, inter-semester transitions, or other disruptions;

(vi) Attesting to meeting the criteria of paragraph (c)(1) or (2) of this section based on relevant practice area of the clinic; and

(vii) Attesting to all other criteria as established by the OED Director.

(d) *Limited recognition for law students participating in the USPTO Law School Clinic Certification Program.* (1) The OED Director may grant limited recognition to practice before the Office in patent or trademark matters, or both, to law school students enrolled in a clinic of a law school that is participating in the USPTO Law School Clinic Certification Program upon submission and approval of an application by a law student to the Office of Enrollment and Discipline in accordance with criteria established by the OED Director.

(2) In order to be granted limited recognition to practice before the Office in patent matters under the USPTO Law School Clinic Certification Program, a law student must:

(i) Be enrolled in a law school that is an active participant in the USPTO Law School Clinic Certification Program;

(ii) Be enrolled in the patent practice area of a clinic of the participating law school;

(iii) Have successfully completed at least one year of law school or the equivalent;

(iv) Have read the USPTO Rules of Professional Conduct and the relevant rules of practice and procedure for patent matters;

(v) Be supervised by an approved Faculty Clinic Supervisor pursuant to paragraph (c)(1) of this section;

(vi) Be certified by the dean of the participating law school, or one authorized to act for the dean, as: having completed the first year of law school or the equivalent, being in compliance with the law school's ethics code, and being of good moral character and reputation;

(vii) Neither ask for nor receive any fee or compensation of any kind for legal services from a clinic client on whose behalf service is rendered;

(viii) Have proved to the satisfaction of the OED Director that he or she possesses the scientific and technical qualifications necessary for him or her to render patent applicants valuable service; and

(ix) Comply with all additional criteria established by the OED Director.

(3) In order to be granted limited recognition to practice before the Office in trademark matters under the USPTO Law School Clinic Certification Program, a law student must:

(i) Be enrolled in a law school that is an active participant in the USPTO Law School Clinic Certification Program;

(ii) Be enrolled in the trademark practice area of a clinic of the participating law school;

(iii) Have successfully completed at least one year of law school or the equivalent;

(iv) Have read the USPTO Rules of Professional Conduct and the relevant USPTO rules of practice and procedure for trademark matters;

(v) Be supervised by an approved Faculty Clinic Supervisor pursuant to paragraph (c)(2) of this section;

(vi) Be certified by the dean of the participating law school, or one authorized to act for the dean, as: having completed the first year of law school or the equivalent, being in compliance with the law school's ethics code, and being of good moral character and reputation;

(vii) Neither ask for nor receive any fee or compensation of any kind for legal services from a clinic client on whose behalf service is rendered; and

(viii) Comply with all additional criteria established by the OED Director.

(4) Students registered to practice before the Office in patent matters as a patent agent, or authorized to practice before the Office in trademark matters under § 11.14, must complete and submit a student application pursuant to paragraph (d)(1) of this section and meet the criteria of paragraph (d)(2) or (3) of this section, as applicable, in order to participate in the program.

■ 4. Add § 11.17 to read as follows:

§ 11.17 Requirements for participation in the USPTO Law School Clinic Certification Program.

(a) Each law school participating in the USPTO Law School Clinic Certification Program must provide its patent and/or trademark services on a pro bono basis for clients that qualify for assistance from the law school's clinic.

(b) Each law school participating in the USPTO Law School Clinic Certification Program shall, on a quarterly basis, provide the Office of Enrollment and Discipline with a report regarding its clinic activity, which shall include:

(1) The number of law students participating in each of the patent and trademark practice areas of the school's clinic in the preceding quarter;

(2) The number of faculty participating in each of the patent and trademark practice areas of the school's clinic in the preceding quarter;

(3) The number of consultations provided to persons who requested assistance from the law school clinic in the preceding quarter;

(4) The number of client representations undertaken for each of the patent and trademark practice areas of the school's clinic in the preceding quarter;

(5) The identity and number of applications and responses filed in each of the patent and/or trademark practice areas of the school's clinic in the preceding quarter;

(6) The number of patents issued, or trademarks registered, to clients of the clinic in the preceding quarter; and

(7) All other information specified by the OED Director.

(c) *Inactivation of law schools participating in the USPTO Law School Certification Program.*

(1) The OED Director may inactivate a patent and/or trademark practice area of a participating law school:

(i) If the participating law school does not have an approved Faculty Clinic Supervisor for the relevant practice area, as described in § 11.16(c);

(ii) If the participating law school does not meet each of the requirements and criteria for participation in the USPTO Law School Clinic Certification Program as set forth in § 11.16, this section, or as otherwise established by the OED Director; or

(iii) For other good cause as determined by the OED Director.

(2) In the event that a practice area of a participating school is inactivated, the participating law school students must:

(i) Immediately cease all student practice before the Office in the relevant practice area and notify each client of such; and

(ii) Disassociate themselves from all client matters relating to practice before the Office in the relevant practice area, including complying with Office and State rules for withdrawal from representation.

(3) A patent or trademark practice area of a law school clinic that has been inactivated may be restored to active status, upon application to and approval by the OED Director.

(d) *Removal of law schools participating in the USPTO Law School Clinic Certification Program.* (1) The OED Director may remove a patent and/or trademark practice area of the clinic of a law school participating in the USPTO Law School Clinic Certification Program:

(i) Upon request from the law school;

(ii) If the participating law school does not meet each of the requirements and criteria for participation in the USPTO Law School Clinic Certification Program as set forth in § 11.16, this section, or as otherwise established by the OED Director; or

(iii) For other good cause as determined by the OED Director.

(2) In the event that a practice area of a participating school is removed by the OED Director, the participating law school students must:

(i) Immediately cease all student practice before the Office in the relevant practice area and notify the client of such; and

(ii) Disassociate themselves from all client matters relating to practice before the Office in the relevant practice area, including complying with Office and State rules for withdrawal from representation.

(3) A school that has been removed from participation in the USPTO Law School Clinic Certification Program under this section may reapply to the program in compliance with § 11.16.

Dated: December 8, 2015.

Michelle K. Lee,

Under Secretary of Commerce for Intellectual Property and Director of the United States Patent and Trademark Office.

[FR Doc. 2015–31627 Filed 12–15–15; 8:45 am]

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ENVIRONMENTAL PROTECTION AGENCY

40 CFR Part 52

[EPA–R05–OAR–2015–0196; FRL–9940–11–Region 5]

Air Plan Approval; Minnesota and Michigan; Revision to Taconite Federal Implementation Plan

AGENCY: Environmental Protection Agency (EPA).

ACTION: Proposed rule; reopening of public comment period.

SUMMARY: Environmental Protection Agency (EPA) is reopening the public comment period for a proposed rule published October 22, 2015. On November 23, 2015, EPA received a request from the National Tribal Air

Association to extend the public comment period an additional 120 days from the closing date of November 23, 2015 and from the Fond du Lac Band of Lake Superior Chippewa for an unspecified period of time. EPA is, therefore, reopening the comment period for an additional 30 days after November 23, 2015.

DATES: The comment period for the proposed rule published on October 22, 2015 (80 FR 64160), is reopened. Comments must be received on or before December 23, 2015.

ADDRESSES: Submit your comments, identified by Docket ID No. EPA–R05–OAR–2015–0196, to: Douglas Aburano, Chief, Attainment Planning and Maintenance Section, Air Programs Branch (AR–18J), U.S. Environmental Protection Agency, 77 West Jackson Boulevard, Chicago, Illinois 60604, (312) 353–6960, *aburano.douglas@epa.gov*. Additional instructions on how to comment can be found in the notice of proposed rulemaking published October 22, 2015 (80 FR 64160).

FOR FURTHER INFORMATION CONTACT: Steven Rosenthal, Environmental Engineer, Attainment Planning & Maintenance Section, Air Programs Branch (AR–18J), U.S. Environmental Protection Agency, Region 5, 77 West Jackson Boulevard, Chicago, Illinois 60604, (312) 886–6052, *rosenthal.steven@epa.gov*.

SUPPLEMENTARY INFORMATION: On October 22, 2015, EPA proposed revisions to a Federal implementation plan (FIP) addressing the requirement for best available retrofit technology (BART) for taconite plants in Minnesota and Michigan. In response to petitions for reconsideration, we proposed to revise the nitrogen oxides (NO_X) limits for taconite furnaces at facilities owned and operated by Cliffs Natural Resources (Cliffs) and ArcelorMittal USA LLC (ArcelorMittal). We also proposed to revise the sulfur dioxide (SO_2) requirements at two of Cliffs' facilities. We proposed these changes because new information had come to light that was not available when we originally promulgated the FIP on February 6, 2013.

Dated: December 4, 2015.

Susan Hedman,

Regional Administrator, Region 5.

[FR Doc. 2015–31523 Filed 12–15–15; 8:45 am]

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FEDERAL COMMUNICATIONS COMMISSION

47 CFR Part 12

[PS Docket No. 14–174; Report No. 3034]

Petition for Reconsideration of Action in a Rulemaking Proceeding

AGENCY: Federal Communications Commission.

ACTION: Petition for reconsideration.

SUMMARY: In this document, a Petition for Reconsideration (Petition) has been filed in the Commission's Rulemaking Proceeding by David C. Bergmann, on behalf of the National Association of State Utility Consumer Advocates.

DATES: Oppositions to the Petition must be filed on or before December 31, 2015. Replies to an opposition must be filed on or before January 11, 2016.

ADDRESSES: Federal Communications Commission, 445 12th Street SW., Washington DC 20554.

FOR FURTHER INFORMATION CONTACT: Linda Pintro, Public Safety and Homeland Security Bureau, 202–418–7490, *linda.pintro@fcc.gov.*

SUPPLEMENTARY INFORMATION: This is a summary of Commission's document, Report No. 3034, released December 2, 2015. The full text of Report No. 3034 is available for viewing and copying at the FCC Reference Information Center, 445 12th Street SW., Room CY–A257 Washington, DC 20554, or may be accessed online via the Commission's Electronic Comment Filing System at *http://apps.fcc.gov/ecfs/*. The Commission will not send a copy of the *document* pursuant to the Congressional Review Act, 5 U.S.C. 801(a)(1)(A), because this document does not have an impact on any rules of particular applicability.

Subject: Ensuring Continuity of 911 Communications Report and Order, published at 80 FR 62470, October 16, 2015, in PS Docket No. 14–174. This *document* is published pursuant to 47 CFR 1.429(e). *See also* 47 CFR 1.4(b)(1).

Number of Petitions Filed: 1

Federal Communications Commission.

Gloria J. Miles,

Federal Register Liaison Officer, Office of the Secretary.

[FR Doc. 2015–31574 Filed 12–15–15; 8:45 am]

BILLING CODE 6712–01–P

Notices

Federal Register
Vol. 80, No. 241
Wednesday, December 16, 2015

This section of the FEDERAL REGISTER contains documents other than rules or proposed rules that are applicable to the public. Notices of hearings and investigations, committee meetings, agency decisions and rulings, delegations of authority, filing of petitions and applications and agency statements of organization and functions are examples of documents appearing in this section.

ADMINISTRATIVE CONFERENCE OF THE UNITED STATES

Adoption of Recommendations

AGENCY: Administrative Conference of the United States.

ACTION: Notice.

SUMMARY: The Administrative Conference of the United States adopted three recommendations at its Sixty-fourth Plenary Session. The appended recommendations address: Technical Assistance by Federal Agencies in the Legislative Process; Declaratory Orders; and Designing Federal Permitting Programs.

FOR FURTHER INFORMATION CONTACT: For Recommendation 2015–2, Alissa Ardito; for Recommendation 2015–3, Amber Williams; and for Recommendation 2015–4, Connie Vogelmann. For all three of these actions the address and telephone number are: Administrative Conference of the United States, Suite 706 South, 1120 20th Street NW., Washington, DC 20036; Telephone 202–480–2080.

SUPPLEMENTARY INFORMATION: The Administrative Conference Act, 5 U.S.C. 591–596, established the Administrative Conference of the United States. The Conference studies the efficiency, adequacy, and fairness of the administrative procedures used by Federal agencies and makes recommendations to agencies, the President, Congress, and the Judicial Conference of the United States for procedural improvements (5 U.S.C. 594(1)). For further information about the Conference and its activities, see *www.acus.gov.* At its Sixty-fourth Plenary Session, held December 4, 2015, the Assembly of the Conference adopted three recommendations.

Recommendation 2015–2, *Technical Assistance by Federal Agencies in the Legislative Process.* This recommendation offers best practices for agencies when providing Congress with technical drafting assistance. It is intended to apply to situations in which Congress originates the draft legislation and asks an agency to review and provide expert technical feedback on the draft without necessarily taking an official substantive position. The recommendation urges agencies and Congress to engage proactively in mutually beneficial outreach and education. It highlights the practice of providing congressional requesters with redline drafts showing how proposed bills would affect existing law; suggests that agencies consider ways to involve appropriate agency experts in the process; and urges agencies to maintain a strong working relationship between legislative affairs and legislative counsel offices.

Recommendation 2015–3, *Declaratory Orders.* This recommendation identifies contexts in which agencies should consider the use of declaratory orders in administrative adjudications. It also highlights best practices relating to the use of declaratory orders, including explaining the agency's procedures for issuing declaratory orders, ensuring adequate opportunities for public participation in the proceedings, responding to petitions for declaratory orders in a timely manner, and making declaratory orders and other dispositions of petitions readily available to the public.

Recommendation 2015–4, *Designing Federal Permitting Programs.* This recommendation describes different types of permitting systems and provides factors for agencies to consider when designing or reviewing permitting programs. The recommendation discusses both ''general'' permits (which are granted so long as certain requirements are met) and ''specific'' permits (which involve fact-intensive, case-by-case determinations), as well as intermediate or hybrid permitting programs. It encourages agencies that adopt permitting systems to design them so as to minimize burdens on the agency and regulated entities while maintaining required regulatory protections.

The Appendix below sets forth the full texts of these three recommendations. The Conference will transmit them to affected agencies, Congress, and the Judicial Conference of the United States. The recommendations are not binding, so the entities to which they are addressed will make decisions on their implementation.

The Conference based these recommendations on research reports that are posted at: *http://www.acus.gov/64th.* A video of the Plenary Session is available at: *new.livestream.com/ACUS/64thPlenarySession,* and a transcript of the Plenary Session will be posted when it is available.

Dated: December 10, 2015.

Shawne C. McGibbon,

General Counsel.

APPENDIX—RECOMMENDATIONS OF THE ADMINISTRATIVE CONFERENCE OF THE UNITED STATES

Administrative Conference Recommendation 2015–2 Technical Assistance by Federal Agencies in the Legislative Process

Adopted December 4, 2015

Federal agencies play a significant role in the legislative process.[1] While agencies can be the primary drafters of the statutes they administer, it is more common for agencies to respond to Congressional requests to provide technical assistance in statutory drafting. Despite the extent of agency involvement in drafting legislation, the precise nature of the interactions between agencies and Congress in the drafting process remains obscure.

Generally speaking, federal agencies engage in two kinds of legislative drafting activities: substantive and technical. Legislative activities considered ''substantive'' are subject to the Office of Management and Budget (OMB) coordination and preclearance process governed by OMB Circular A–19, which does not explicitly define substantive legislative activities or technical legislative assistance.[2] Substantive legislative activities include the submission of agencies' annual legislative programs, proposed legislation such as draft bills and supporting documents an agency may present to Congress, any endorsement of federal legislation, and the submission of agency views on pending bills before Congress as well as official agency testimony before a Congressional committee.[3]

Agencies also provide Congress with technical drafting assistance. Rather than originating with the agency or the Administration, in the case of technical assistance, Congress originates the draft

[1] *See* Christopher J. Walker, Federal Agencies in the Legislative Process: Technical Assistance in Statutory Drafting 1–4 (November 2015), *available at https://www.acus.gov/report/technical-assistance-draft-report* [hereinafter Walker Report].

[2] Office of Management and Budget, Circular A–19 (revised Sept. 20, 1979), *https://www.whitehouse.gov/omb/circulars_a019/* [hereinafter OMB Circular A–19].

[3] *Id.* sections (6)(a) and (7)(a).

legislation and asks an agency to review and provide feedback on the draft. Circular A–19 advises agencies to keep OMB informed of their activities and to clarify that agency feedback does not reflect the views or policies of the agency or Administration.[4] No other standard procedures or requirements apply when agencies respond to Congressional requests—from committee staff, staff of individual Members of Congress, or Members themselves—for technical assistance. In consequence, agency procedures and practices appear multifarious.

Congress frequently requests technical assistance from agencies on proposed legislation. Congressional requests for technical assistance in statutory drafting can range from review of draft legislation to requests for the agency to draft legislation based on specifications provided by the Congressional requester. Despite the fact that technical assistance does not require OMB preclearance, there is some consistency in the assistance process across agencies. Agencies often provide technical drafting assistance on legislation that directly affects those agencies and respond to Congressional requests regardless of factors such as the likelihood of the legislation being enacted, its effect on the agency, or the party affiliation of the requesting Member. Agency actors involved in the process include the agency's legislative affairs office, program and policy experts, and legislative counsel.[5] In some agencies, regulatory counsel also participate routinely. Moreover, agency responses range from oral discussions of general feedback to written memoranda to suggested legislative language or redlined suggestions on the draft legislation.

A well-run program to provide Congress with technical assistance on draft legislation yields important benefits to the agency. Responding to such Congressional requests assists the agency in maintaining a healthy and productive relationship with Congress, ensures the proposed legislation is consonant with the existing statutory and regulatory scheme, helps educate Congressional staff about the agency's statutory and regulatory framework, and keeps the agency informed of potential legislative action that could affect the agency.

Although agencies, as a rule, strive to respond to all requests, they continue to face challenges in providing technical assistance. Congressional staff may be unfamiliar with an agency's enabling legislation and governing statutes. Technical assistance provided informally does not always involve the offices of legislative counsel or legislative affairs, although both offices should be kept informed and involved. The distinction between substantive and technical drafting assistance is not always self-evident, and Congressional requesters of technical drafting assistance often are actually seeking substantive feedback from the agency experts on the proposed legislation. The provision of technical assistance on appropriations legislation presents unique demands on both agency legislative counsel and budget offices.

Various agencies have developed distinct practices and procedures to address the provision of technical assistance that the Conference believes should be considered best practices. For example, many agencies have established internal guidelines governing the agency procedures for providing technical assistance. Memorializing agency procedures ensures that the provision of technical assistance is consistent throughout the agency. By stating in written guidance that legislative counsel and legislative affairs offices must be involved, for instance, agencies can help diminish the prospect of substantive assistance being provided under the guise of technical assistance. Although agencies should have flexibility to adopt procedures that are tailored to their agency-specific structures, norms, and internal processes, memorializing their legislative drafting processes, as the Departments of Homeland Security, Interior, and Labor have done, can ensure that all agency officials involved understand the processes and can help educate personnel new to the agency.

Some agencies, the Department of Housing and Urban Development among them, utilize a practice of providing Congressional requesters with a Ramseyer/Cordon draft as part of the technical assistance response. A Ramseyer/Cordon draft is a redline of the existing law that shows how the proposed legislation would affect current law by underscoring proposed additions to existing law and bracketing the text of proposed deletions. Providing such drafts, when feasible, helps Congressional staffers unfamiliar with the agency's governing statutes to better comprehend the ramifications of the contemplated legislation.

Maintaining separate roles for legislative affairs and legislative counsel offices also has proven beneficial. Legislative affairs staff engage Congress directly and must often make politically sensitive decisions when communicating with Congress. By contrast, legislative counsel offices, by providing expert drafting assistance regardless of the Administration's official policy stance on the legislation, maintain the non-partisan status of the agency in the legislative process. These offices play important yet distinct roles in an agency's legislative activities that help maintain a healthy working relationship with Congress and enhance the recognition of the agency's expertise in legislative drafting and in the relevant subject matter. This division, especially when both offices communicate regularly, can help agencies monitor the line between legislative assistance that is purely technical and assistance that merges into an agency's official views on pending legislation.

Appropriations legislation presents agencies with potential coordination problems as substantive provisions or ''riders'' may require technical drafting assistance, but agency processes for reviewing appropriations legislation are channeled through agency budget or finance offices. It is crucial for the budget office to communicate with an agency's legislative counsel office to anticipate and later address requests for technical assistance related to appropriations bills. Agencies have taken a variety of approaches to address this issue, ranging from tasking a staffer in an agency legislative counsel office with tracking appropriations bills; to holding weekly meetings with budget, legislative affairs, and legislative counsel staff; to emphasizing less informally that the offices establish a strong working relationship.

Educational outreach on the part of both agencies and Congress, by further developing expertise on both sides and by cultivating professional working relationships, has the potential to enhance the provision of technical assistance over time. In-person educational efforts may include briefings of Members and their staff on an agency's statutory and regulatory scheme as well as its programs and initiatives, face-to-face meetings with legislative counsel and Congressional staff, and training in statutory drafting for both Congressional staff and agency legislative counsel attorneys.

The following recommendations derive from the best practices that certain agencies have developed to navigate these challenges and focus on both external practices that may strengthen agencies' relationship with Congress in the legislative process and internal agency practices to improve the technical drafting assistance process and external practices that may strengthen agencies' relationship with Congress in the legislative process.

Recommendation

Congress–Agency Relationship in the Legislative Process

1. Congressional committees and individual Members should aim to reach out to agencies for technical assistance early in the legislative drafting process.

2. Federal agencies should endeavor to provide Congress with technical drafting assistance when asked. A specific Administration directive or policy may make the provision of technical assistance inappropriate in some instances. Agencies should recognize that they need not expend the same amount of time and resources on each request.

3. To improve the quality of proposed legislation and strengthen their relations with Congress, agencies should be actively engaged in educational efforts, including in-person briefings and interactions, to educate Congressional staff about the agencies' respective statutory and regulatory frameworks and agency technical drafting expertise.

Agency Technical Drafting Assistance

4. To improve intra-agency coordination and processing of Congressional requests for drafting assistance, agencies should consider memorializing their agency-specific procedures for responding to technical assistance requests. These procedures should provide that requests for technical assistance be referred to the agency's office with responsibility for legislative affairs.

[4] *Id.* section 7(i). Independent agencies routinely provide technical assistance, outside of the OMB Circular A–19 process, in line with their enabling statutes.

[5] While this recommendation uses the term ''legislative affairs office,'' some agencies may have different offices or individuals responsible for legislative affairs, and this recommendation encompasses such arrangements.

5. Similarly, agencies should consider ways to better identify and involve the appropriate agency experts—in particular, the relevant agency policy and program personnel in addition to the legislative drafting experts—in the technical drafting assistance process. These efforts may involve, for example, establishing an internal agency distribution list for technical drafting assistance requests and maintaining an internal list of appropriate agency policy and program contacts.

6. When feasible and appropriate, agencies should provide the Congressional requester with a redline draft showing how the bill would modify existing law (known as a Ramseyer/Cordon draft) as part of the technical assistance response.

7. Agencies should maintain the distinct roles of, and strong working relationships among, their legislative affairs personnel, policy and program experts, and legislative counsel.

8. Agencies also should strive to ensure that the budget office and legislative counsel communicate so that legislative counsel will be able to provide appropriate advice on technical drafting of substantive provisions in appropriations legislation.

Administrative Conference Recommendation 2015–3

Declaratory Orders

Adopted December 4, 2015

Providing clarity and certainty is an enduring challenge of administrative governance, particularly in the regulatory context. Sometimes statutes and regulations fail to provide sufficient clarity with regard to their applicability to a particular project or transaction. In such instances, businesses and individuals may be unable or unwilling to act, and the consequences for the economy, society, and technological progress can be significant and harmful. The predominant way agencies address this problem is by providing guidance to regulated parties.[1] Although the many forms of agency guidance—such as interpretive rules and policy statements—do much to dispel regulatory uncertainty, they cannot eliminate it entirely. This is because they are generally informal and not legally binding on the agency that issues them. Regulated parties may usually be able to rely upon them, but if an agency changes its position after a transaction is completed, the consequences for the affected party can be severe. As the potential costs of misplaced reliance rise, even a small chance that an agency will not adhere to a position offered in guidance can become intolerable.

When it enacted the Administrative Procedure Act (APA) in 1946, Congress included a provision designed to address this difficult problem. In 5 U.S.C. 554(e), it provided that an ''agency, with like effect as in the case of other orders, and in its sound discretion, may issue a declaratory order to terminate a controversy or remove uncertainty.'' [2] The declaratory order is a type of adjudication that serves an important advice-giving function. It may be issued in response to a petition filed with the agency [3] (as is usually the case) or on the agency's own motion. It is well tailored to provide a level of certainty that may not be achievable using more informal kinds of guidance. This is because it is non-coercive and yet legally binds the agency and the named party, but only on the facts assumed in the order. The agency remains free to change its position with adequate explanation in a subsequent proceeding. It is a device that affords substantial administrative discretion—the agency may decline a request to institute a declaratory proceeding or to issue a declaratory order. An agency's decision, be it a denial of a petition or the issuance of a declaratory order, is judicially reviewable. But the scope of review is limited, and the position an agency takes in a declaratory order is typically afforded deference,[4] both on judicial review and when relevant to matters at issue in subsequent or parallel litigation.

An agency may properly use a declaratory order for a wide variety of purposes, including to: (1) Interpret the agency's governing statute or own regulations; (2) define terms of art; (3) clarify whether a matter falls within federal regulatory authority; or (4) address questions of preemption.[5] One occasion for doing so is in response to a court's request for a ruling when the court has found that the agency has primary jurisdiction over a matter being litigated. By presenting the agency's views through a document of easily ascertainable legal effect, declaratory orders may reduce or eliminate litigation.[6] By using declaratory orders to address narrow questions raised by specific and uncontested facts, an agency can precisely define the legal issues it addresses and reserve related issues for future resolution, thereby facilitating an incremental approach to the provision of guidance. The resulting body of agency precedent will not only be useful to regulated and other interested parties, but may also prove invaluable to the agency when it later decides to conduct a rulemaking or other proceeding for formulating policy on a broader scale. Other uses may be possible as well. For example, an agency that conducts mass adjudication could use the declaratory order to promote uniformity by choosing to give practical and detailed guidance while also making decisional law binding on the parties to the proceeding regarding the proper application of the law to commonly encountered factual circumstances.

There are several benefits to an agency when it uses declaratory orders. First, declaratory orders promote voluntary compliance, which saves agency resources that would otherwise be spent on enforcement. Second, declaratory orders promote uniformity and fairness in treatment among the agency's regulated parties. Third, declaratory orders facilitate communication between the agency and its regulated parties, which can help highlight issues before they become problems. Finally, declaratory orders help the agency stay current by allowing regulated parties to communicate how they are doing business so that agency officials can understand and address emerging issues.

Despite the apparent usefulness of the declaratory order as a tool of administrative governance, agencies have demonstrated a persistent reluctance to use it. Several developments may encourage agencies to overcome this traditional reluctance to use declaratory orders. First, it is now reasonably clear that agencies may issue declaratory orders in informal adjudication.[7] This development expands the availability of the device and also reduces the cost and procedural burden of using declaratory orders.[8] Second, courts today are often

[1] The Administrative Conference has adopted a number of recommendations on agency guidance. *See* Recommendation 2014–3, *Guidance in the Rulemaking Process,* 79 FR 35992 (June 25, 2014), *available at https://www.acus.gov/recommendation/guidance-rulemaking-process;* Recommendation 92–2, *Agency Policy Statements,* 57 FR 30103 (July 8, 1992), *available at https://www.acus.gov/recommendation/agency-policy-statements;* Recommendation 76–5, *Interpretive Rules of General Applicability and Statements of General Policy,* 41 FR 56769 (Dec. 30, 1976), *available at https://www.acus.gov/recommendation/interpretive-rules-general-applicability-and-statements-general-policy;* Recommendation 75–9, *Internal Revenue Service Procedures: Taxpayer Services and Complaints,* 41 FR 3986 (Jan. 27, 1976), *available at https://www.acus.gov/recommendation/* internal-revenue-service-procedures-taxpayer-services-and-complaints; Recommendation 71–3, *Articulation of Agency Policies,* 38 FR 19788 (July 23, 1973), *available at https://www.acus.gov/recommendation/articulation-agency-policies.*

[2] 5 U.S.C. 554(e) (2012); *see generally* Administrative Procedure in Government Agencies, Final Report of the Attorney General's Committee on Administrative Procedure, S. Doc. No. 77–8, at 30–34 (1941) (urging Congress to include the declaratory order provision in the APA).

[3] An agency so authorized may assess a filing fee to help defray the cost of issuing declaratory orders in response to petitions.

[4] The level of deference may depend on the formality of the procedure used, *see* United States v. Mead Corp., 553 U.S. 218 (2001), though ''[c]ourts have afforded *Chevron* deference to declaratory orders issued through both formal and informal adjudication.'' Emily S. Bremer, Declaratory Orders 25 (Oct. 30, 2015) *available at https://www.acus.gov/report/declaratory-orders-final-report* [hereinafter Bremer] (citing City of Arlington v. FCC, 133 S. Ct. 1863 (2013) (giving *Chevron* deference to a declaratory ruling issued by the FCC through informal adjudication)).

[5] *See generally* Ill. Terminal R.R. v. ICC, 671 F.2d 1214 (8th Cir. 1992); N.Y. State Comm'n on Cable Television v. FCC, 669 F.2d 58 (2d Cir. 1982); N.C. Utils. Comm'n, 537 F.2d 787 (4th Cir. 1976); Ashland Oil & Ref. Co. v. FPC, 421 F.2d 17 (6th Cir. 1970).

[6] *Cf.* Mitchell Rogovin & Donald L. Korb, *The Four R's Revisited: Regulations, Rulings, Reliance, and Retroativity in the 21st Century: A View from Within,* 46 Duq. L. Rev. 323,331 (2008).

[7] *See* Am. Airlines, Inc. v. DOT, 202 F.3d 788, 796–97 (5th Cir. 2000); Wilson v. A.H. Belo Corp., 87 F.3d 393, 397 (9th Cir. 1996); Texas v. United States, 866 F.2d 1546, 1555–56 (5th Cir. 1989); Bremer, *supra* note 4 at 12–13, 32–33, 36–37. For example, courts have affirmed the sufficiency of basic notice-and-comment procedures when agencies issue a declaratory order in informal adjudication. *See* City of Arlington v. FCC, 668 F.3d 229, 243–45 (5th Cir. 2012), *aff'd* 133 S. Ct. 1863 (2013).

[8] Even if the matter is one subject by statute to formal adjudication under the APA, an agency may be able to streamline the process of issuing a declaratory order. *Cf.* Administrative Conference of

Continued

willing to review guidance documents and to question an agency's characterization of its action as non-binding. Agencies may be able to enhance their chances of prevailing in court by using declaratory orders—a binding, but targeted form of instruction—in lieu of non-binding, legislative guidance. Agencies may also be able to use declaratory orders to provide requisite notice to regulated parties of the agency's intention to enforce in the future a rule or principle that has previously been communicated only via non-binding guidance. Finally, new programs and new challenges facing old programs may create opportunities to beneficially expand the use of declaratory orders.

The Administrative Conference recognizes the declaratory order as a useful device to be used in appropriate circumstances. To that end, this recommendation provides guidance and best practices to agencies as they consider implementing or improving their use of declaratory orders.

Recommendation

1. Agencies should consider issuing declaratory orders as authorized by 5 U.S.C. 554(e), either sua sponte or by petition. A declaratory order can provide a legally binding decision to the parties to the proceeding, without imposing a penalty, sanction, or other liability, in order to terminate an actual or emerging controversy or to remove uncertainty in the application of existing legal requirements. With respect to entities other than the parties to the proceeding, it can provide non-binding guidance.

2. Any filing fees for issuing declaratory orders should be reasonable within the fee structure of the agency and contain appropriate exemptions and waivers.

Potential Uses of Declaratory Orders

3. An agency should consider issuing declaratory orders in several ways, including, but not limited, to:

(a) Communicating the agency's considered views regarding the meaning of its governing statute, regulations, or other legal documents (such as permits, licenses, certificates, or other authorizations the agency has issued);

(b) Explaining how existing legal requirements apply to proposed or contemplated transactions or other activities;

(c) Defining terms of art that are used within the agency's regulatory scheme;

(d) Clarifying whether a matter falls within the agency's regulatory authority;

(e) Clarifying a division of jurisdiction between or among federal agencies that operate in a shared regulatory space; and

(f) Addressing questions of preemption.

4. Agencies should look for opportunities to experiment with innovative uses of declaratory orders to improve regulatory programs.

Determining Minimal Procedural Requirements for Declaratory Orders

5. Each agency that uses declaratory orders should have written and publicly available procedures explaining how the agency initiates, conducts, and terminates declaratory proceedings. An agency should also communicate in a written and publicly available way its preferred uses of declaratory orders.

6. When designing the procedures for its declaratory proceedings, an agency should begin by determining whether or not the matter is one that must be adjudicated according to the formal adjudication provisions of the APA. If the matter is not required by statute to be conducted under the APA's formal adjudication provisions, an agency has substantial procedural discretion, but at a minimum should provide a basic form of notice and opportunity for comment, although it need not be equivalent to the notice-and-comment process used in rulemaking.

7. Agency procedures should provide guidance regarding the information that petitioners should include in a petition for declaratory order.

Giving Notice and Collecting Information

8. Each agency should provide a way for petitioners and other interested parties to learn when the agency has received a petition for declaratory order or intends to issue a declaratory order on its own motion. The agency should tailor this communication according to the nature of the proceeding and the needs of potential commenters.

9. Each agency should provide a way for interested parties to participate in declaratory order proceedings.

(a) If the matter is one of broad interest or general policy, the agency should allow broad public participation.

(b) If the declaratory proceeding involves a narrow question of how existing regulations would apply to an individual party's proposed actions, the agency may choose to manage the submission of comments via an intervention process.

Timeliness and Availability of Declaratory Orders

10. Agencies that receive a petition for declaratory order should respond to that petition within a reasonable period of time. If an agency declines to act on the petition, it should give prompt notice of its decision, accompanied by a brief explanation of its reasons.

11. Agencies should make their declaratory orders and other dispositions on petitions available to the public in a centralized and easy-to-find location on their Web sites.

Administrative Conference Recommendation 2015–4

Designing Federal Permitting Programs

Adopted December 4, 2015

Regulatory permits are ubiquitous in modern society, and each year dozens of federal agencies administering their regulatory permit authority issue tens of thousands of permits covering a broad and diverse range of actions.[1] The APA includes the term ''permit'' in its definition of ''license.'' In addition to agency permits, the APA defines licenses to include ''the whole or part of an agency . . . certificate, approval, registration, charter, membership, statutory exemption or other form of permission.''[2] Otherwise, the APA provides little elaboration on the definition of a permit.[3] For purposes of this recommendation, a regulatory permit is defined as any administrative agency's statutorily authorized, discretionary, judicially reviewable granting of permission to do something that would otherwise be statutorily prohibited. This recommendation treats any agency action that meets this definition as a permit, regardless of how it is styled by the agency (*e.g.,* ''license,'' ''conditional exemption'').

Permits exist on a continuum of agency regulation, falling between exemptions (in which an activity is not regulated at all) and prohibitions. Broadly speaking, there are two contrasting approaches to permitting.[4] In specific permitting, upon receiving an application, an agency engages in extensive fact gathering and deliberation particular to the individual circumstances of the applicant's proposed action, after which the agency issues a detailed permit tailored to the applicant's situation. In their strictest form, specific permits can demand so much of the permit applicant in terms of cost, information, and time that they closely resemble prohibitions. However, some specific permits can be lenient, with relatively few conditions placed on regulated entities.

In general permitting, an agency issues a permit that defines and approves a category of activity on its own initiative, and allows entities engaging in that activity to readily take advantage of the permit. Agency review of specific facts in any particular case is generally limited unless the agency finds good cause to condition or withdraw the general approval. In their most flexible form, general permits can resemble exemptions in form and effect, with few requirements on regulated entities and relatively little agency oversight. On the other hand, general permits may place requirements on regulated entities that aid agency oversight and enforcement. Some permits toward the more general end of the spectrum require the regulated entity to provide notice to the regulator and others do not.

Between general and specific permits lie many possible intermediate forms of permitting that can exhibit traits of both general and specific permitting.[5] These

the United States, Recommendation 70–3, *Summary Decision in Agency Adjudication,* 38 FR 19785 (July 23, 1973). *See generally* Weinberger v. Hynson, Westcott & Dunning, 412 U.S. 625 (1973).

[1] Eric Biber & J.B. Ruhl, Designing Regulatory Permits 2 (2015), *https://www.acus.gov/report/licensing-and-permitting-final-report.* For a more complete discussion of different types of permits and permitting systems, see Eric Biber & J.B. Ruhl, *The Permit Power Revisited: The Theory and Practice of Regulatory Permits in the Administrative State,* 64 Duke L.J. 133 (2014).

[2] 5 U.S.C. 551(8).

[3] *See* Biber & Ruhl, *supra* note 1, at 3–4 (discussing lack of APA definition).

[4] *Id.* at 2–6.

[5] *Id.* at 8–10 (discussing possible hybrid permitting and providing an example). For instance, some of the nationwide permits utilized by the Army Corps of Engineers to regulate the fill of wetlands pursuant to Section 404 of the Clean Water Act require permittees to provide notice to the agency before proceeding with development

permits, referred to in this recommendation interchangeably as ''intermediate'' or ''hybrid'' permits, may call for intermediate levels of agency review or intermediate requirements to be met by regulated parties, or may contain a mix of features from both general and specific permitting. Intermediate permits provide agencies with significant flexibility, allowing them to tailor permitting to the regulated activity.

This recommendation focuses on the distinction between general and specific permits, and considers intermediate permits as well. It does not specify situations in which exemptions are appropriate or evaluate the extent to which general permits may be preferable to exemptions. Marketable permits, in which permits are bought and traded by regulated entities, may also prove beneficial to agencies, the regulated community, and the public in many circumstances.[6]

General and specific permitting differ in both the system used to issue the permit and in the way permits are issued under the system.[7] In specific permitting, the agency issues a rule outlining the process and standards for obtaining permits, after which regulated entities apply for permits and the agency reviews the submissions, often with public input and judicial review. In general permitting, the agency often promulgates a rule outlining the precise conditions under which regulated entities may take advantage of the permit. This approach imposes significant burdens on the agency upfront; however, once in place, the process of permitting is relatively streamlined and sometimes provides fewer opportunities for public input and judicial review. Although some agencies have traditionally relied primarily on specific permits, general permits may offer agencies advantages in efficiency or resource use.

Most statutes delegate considerable discretion to agencies to decide at what point on the spectrum from general to specific to implement a permitting system.[8] Whether an agency adopts a general or specific permitting system, or an intermediate system, can have significant impacts on the agency, the regulated entities, and third parties affected by the permitting action. If Congress decides to specify which type of permitting system an agency should adopt, Congress may want to consider the guidance provided in this recommendation.

In recent years, there has been increasing public concern over the extent to which inefficiencies in the permitting process delay necessary infrastructure reform.[9] As an initial step, in 2012, Executive Order 13604 established a steering committee to ''facilitate improvements in Federal permitting and review processes for infrastructure projects.'' [10] The order also established an online permit-tracking tool, the Federal Infrastructure Projects Dashboard. The Steering Committee and Dashboard serve to enhance interagency coordination and provide permit tracking to improve agency timeliness.[11] Congress has also been considering modifying the permitting process in various ways.[12] In seeking to reform existing permitting systems or establish a new permitting system, Congress and agencies should also be aware of the comparative advantages of general and specific permits and design or modify such systems accordingly.

Although each permitting system is different, and an agency must tailor its procedures to meet both its statutory mandate and the needs of the particular program at issue, agencies face a number of common considerations when designing or reviewing a permitting system. There are many circumstances in which general permits may save agencies time or resources over specific permits without compromising the goals and standards of the regulatory program, and this recommendation provides guidance on when an agency might benefit most from using a general permitting system. This recommendation identifies a number of elements that should be considered in determining whether an agency should adopt a general permitting system, a specific permitting system, or an intermediate or hybrid system somewhere between the two.

Recommendation

Congressional Delegation of Permitting Power

1. When Congress delegates permitting power to an agency, it should consider whether to specify which type(s) of permitting system(s) on the spectrum from general to specific permitting systems an agency may adopt.

2. If Congress decides to limit an agency's permitting power to a certain type of permit, it should consider the factors discussed in recommendations 3–4 when determining the preferred type of permitting system to mandate. If Congress decides to give agencies discretion on which system to adopt, Congress should consider requiring that agencies make specific findings about the factors discussed in recommendations 3–4 in order to ensure agencies use general or specific permitting authority appropriately.

Agency Establishment of Permitting Systems

3. When an agency designs a permitting system, the agency should be cognizant of the resources, both present and future, that are required to develop and operate the system. In particular, the agency should consider that a general permitting system may require significant resources during the design phase (especially if system design triggers additional procedural or environmental review requirements), but relatively fewer resources once the system is in place. A specific permitting system may require fewer resources upfront but significant resources in its application. The agency should balance resource constraints with competing priorities and opportunity costs.

4. An agency should consider the following additional factors when deciding what type of permitting system, if any, to adopt.

(a) The following conditions weigh in favor of designing a permitting system toward the general end of the spectrum:

i. The effects of the regulated activity are small in magnitude, both in individual instances and from the cumulative impact of the activity;

ii. The variability of effects expected across instances of the regulated activity is low;

iii. The agency is able to expend the upfront resources to design a general permitting system and can subsequently benefit from the reduced administration costs a general permitting system requires to enforce;

iv. The agency wishes to encourage the regulated activity or desires to keep barriers to entry low;

v. The agency does not need to collect detailed information about the regulated activity or regulated parties;

vi. The agency does not need to tailor permits to context-specific instances of the activity;

vii. The agency does not need to monitor the regulated activity closely and does not believe that the information that might be provided by specific permits is needed to facilitate enforcement; or

viii. The agency does not need to exercise significant enforcement discretion to readily enforce the permitting system.

(b) The following conditions weigh in favor of designing a permitting system toward the specific end of the spectrum:

i. The effects of the regulated activity are large in magnitude, either in individual instances or from the cumulative impact of the activity;

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activities. The notice may require substantial amounts of information (including detailed mitigation plans), and the permittee may not be able to proceed with development until directly authorized by the agency. These nationwide permits have elements of both a general permit (they apply to a category of activities, do not require the full range of applicant information that individual permits under Section 404, require and do not require the agency to do the full amount of environmental review associated with individual permits) and a specific permit (they still require substantial information to be submitted by the applicant and may require prior approval by the agency before permitted activities can be initiated).

[6] Permit marketability lies outside the continuum of general permits to specific permits.

[7] *Id.* at 6–7.

[8] For example, the Migratory Bird Treaty Act provides almost no guidance as to the use of general versus specific permits. *See* 16 U.S.C. 703 and 704. Section 404 of the Clean Water Act lays out specific factors that must be met in order to use general permits. *See* 33 U.S.C. 1344(e)(1) and (2). Both of these programs are described in case studies accompanying the report.

[9] *See, e.g.,* Philip K. Howard, Common Good, Two Years Not Ten Years: Redesigning Infrastructure Approvals (2015), *http://commongood.3cdn.net/c613b4cfda258a5fcb_e8m6b5t3x.pdf.*

[10] Performance of Federal Permitting and Review of Infrastructure Projects, 77 FR 18885, 18888 (Mar. 28, 2012) (to be codified at 3 CFR part 100).

[11] *Id.* at 18,887–8. The reforms promoted by E.O. 13604 are largely in accord with the Administrative Conference's Recommendation 1984–1, *Public Regulation of Siting of Industrial Development Projects,* 49 FR 29938 (July 25, 1984). Specifically, Recommendation 1984–1 encouraged interagency coordination of permitting, the establishment of permitting deadlines, and timely processing of permit applications.

[12] *See, e.g.,* H.R. 348, 114th Cong. (2015); H.R. 351, 114th Cong. (2015); H.R. 89, 114th Cong. (2015); S. 33, 114th Cong. (2015); H.R. 161, 114th Cong. (2015). These bills are cited merely as indications of Congressional interest in the permitting process, and the Conference has not reviewed and does not endorse any of their provisions.

ii. The variability of effects expected across instances of the regulated activity is high;

iii. The agency is unable to expend the upfront resources necessary to design a general permitting system or the agency can absorb the higher administration costs necessary to enforce a specific permitting system;

iv. The agency believes that specific controls on particular regulated activities are desirable to reduce, control, or mitigate the negative effects of the regulated activity, or is less concerned about relatively high barriers to entry;

v. The agency needs detailed information about the regulated activity or regulated parties;

vi. The agency needs to tailor permits to context-specific instances of the activity;

vii. The agency needs to monitor the regulated activity closely, and concludes the information provided in specific permits will facilitate enforcement; or

viii. The agency needs to have discretion in enforcing the permitting system against individual entities.

(c) An agency should weigh all the factors and consider implementing a hybrid permitting system that has features of both general and specific permits if the factors described above do not weigh strongly in favor of either general or specific permits or cut against each other.

Agency Review of Existing Permitting Structures

5. Subject to budgetary constraints and other priorities, agencies are encouraged to conduct periodic reviews of their existing permitting structures, consistent with the Administrative Conference's Recommendation 2014–5, *Retrospective Review of Agency Rules.*

6. In reviewing existing permitting structures, agencies should consider the factors in recommendations 3–4 and, where appropriate and consistent with statutory mandates, consider reforming existing permitting systems to align more closely with the goals the agency seeks to accomplish.

7. Subject to budgetary and legal constraints, including the Paperwork Reduction Act and other statutory restrictions on data collection and dissemination, agencies should consider incorporating data-collection into new and existing permitting systems to aid analysis and review.

[FR Doc. 2015–31575 Filed 12–15–15; 8:45 am]

BILLING CODE 6110–01–P

DEPARTMENT OF AGRICULTURE

Food Safety and Inspection Service

[Docket No. FSIS–2014–0034]

Availability of FSIS Compliance Guideline for Controlling Salmonella and Campylobacter in Raw Poultry

AGENCY: Food Safety and Inspection Service, USDA.

ACTION: Notice of availability and opportunity for comment.

SUMMARY: The Food Safety and Inspection Service (FSIS) is announcing the availability of and requesting comment on the revised guideline to assist poultry establishments in controlling *Salmonella* and *Campylobacter* in raw poultry. The Agency has revised its guideline to provide updated information for establishments to use to control pathogens in raw poultry products with the goal of reducing human illnesses associated with consuming poultry contaminated with *Salmonella* and *Campylobacter.* The guideline represents the best practice recommendations of FSIS based on scientific and practical considerations. This document does not represent regulatory requirements. By following this guideline, poultry establishments should be able to produce raw poultry products that have less contamination with pathogens, including *Salmonella* and *Campylobacter,* than would otherwise be the case.

DATES: Submit comments on or before February 16, 2016.

ADDRESSES: A downloadable version of the compliance guideline is available to view and print at *http://www.fsis.usda.gov/Regulations_&_Policies/Compliance_Guides_Index/index.asp.* No hard copies of the compliance guideline have been published.

FSIS invites interested persons to submit comments on this notice. Comments may be submitted by one of the following methods:

Federal eRulemaking Portal: This Web site provides the ability to type short comments directly into the comment field on this Web page or attach a file for lengthier comments. Go to *http://www.regulations.gov/.* Follow the on-line instructions at that site for submitting comments.

Mail, including CD–ROMs: Send to Docket Clerk, U.S. Department of Agriculture, Food Safety and Inspection Service, Patriots Plaza 3, 1400 Independence Avenue SW., Mailstop 3782, Room 8–163B, Washington, DC 20250–3700.

Hand- or courier-delivered submittals: Deliver to Patriots Plaza 3, 355 E Street SW., Room 8–163A, Washington, DC 20250–3700.

Instructions: All items submitted by mail or electronic mail must include the Agency name and docket number FSIS–2014–0034. Comments received in response to this docket will be made available for public inspection and posted without change, including any personal information, to *http://www.regulations.gov.*

Docket: For access to background documents or to comments received, go to the FSIS Docket Room at Patriots Plaza 3, 355 E. Street SW., Room 164–A, Washington, DC 20250–3700 between 8:00 a.m. and 4:30 p.m., Monday through Friday.

FOR FURTHER INFORMATION CONTACT: Daniel L. Engeljohn, Ph.D., Assistant Administrator, Office of Policy and Program Development; Telephone: (202) 205–0495, or by Fax: (202) 720–2025.

SUPPLEMENTARY INFORMATION:

Background

FSIS is responsible for verifying that the nation's commercial supply of meat, poultry, and egg products is safe, wholesome, and properly labeled and packaged.

Salmonella and *Campylobacter* bacteria are among the most frequent causes of foodborne illness. These bacteria can reside in the intestinal tract of animals, including birds. *Salmonella* and *Campylobacter* contamination of raw poultry products occurs during slaughter operations as well as during the live-animal rearing process (*e.g.,* on-farm contamination can coat the exterior of the bird and remain attached to the skin). Contamination with pathogens on poultry can be minimized through the use of preventative pre-harvest practices, with the use of proper sanitary dressing procedures, by maintaining sanitary conditions before and during production, and by the application of antimicrobial interventions during slaughter and thereafter during fabrication of the carcasses into parts and comminuted product.

In 2010, FSIS issued a guideline (third edition) for poultry establishments with recommendations on how to identify hazards of public health concern when conducting their hazard analysis and how to prevent and control these hazards through Hazard Analysis and Critical Control Plans (HACCP), Sanitation Standard Operating Procedures, or other prerequisite programs. FSIS has revised its guideline (fourth edition) to provide updated information for establishments to use to control pathogens in raw poultry products. FSIS has also revised the guideline to include recommendations for establishments regarding lotting and sanitary dressing procedures, pre-harvest interventions and management practices, antimicrobial interventions during slaughter and thereafter during fabrication, and the use of establishment sampling results to inform decision

making. In addition, FSIS revised the guideline to include information on prerequisite programs, including how they can fit into the HACCP system.

Furthermore, since issuance of the most recent version of the guideline in 2010, there have been several outbreaks associated with consumption of raw poultry products, including chicken parts and comminuted (including ground) turkey products. In 2011, there were two *Salmonella* outbreaks associated with ground turkey products (specifically, turkey burgers and ground turkey) that resulted in a total of 148 illnesses and 40 hospitalizations. In 2012 and 2013–2014, there were two *Salmonella* outbreaks associated with consumption of chicken parts that together resulted in over 700 illnesses and over 270 hospitalizations. Also in 2013, a *Salmonella* outbreak resulted from consumption of mechanically separated turkey that was sent to an institutional facility. This outbreak resulted in 9 illnesses and 2 hospitalizations.

In addition, in 2015, the Centers for Disease Control and Prevention (CDC) investigated two separate outbreaks of *Salmonella* enteritidis infections attributed to raw, heat treated, stuffed chicken products resulted in 20 illnesses (15 from one outbreak, and five from the other outbreak). The implicated products were labeled with instructions identifying that the product was uncooked (raw) and included cooking instructions for preparation. Some case-patients reported following the cooking instructions on the label and using a food thermometer to confirm that the recommended temperature was achieved.

FSIS analyzed practices of establishments that manufactured product associated with these outbreaks and found problems with sanitation, intervention use, and the validation of cooking instructions at some or all of these establishments. FSIS considered these problems and is providing recommendations in the revised guideline specific to these issues.

Pre-harvest contamination can affect the level of *Salmonella* and *Campylobacter* on FSIS-regulated products. FSIS has updated the pre-harvest information in the guideline based on recently published information. In addition, in response to a recommendation made by the U.S. Government Accountability Office,[1] FSIS updated the guideline to include known information on the effectiveness of pre-harvest practices. To further inform best practice guidance and to inform other Agency activities, FSIS requests comments and data from industry and other interested parties regarding pre-harvest pathogen control strategies, including information on the effectiveness of pre-harvest strategies in reducing pathogen levels in poultry presented for slaughter.

The recently proposed pathogen reduction performance standards [2] for raw chicken parts and NRTE comminuted chicken and turkey are based on meeting certain Healthy People 2020 (HP2020) goals—specifically, the HP2020 goal to reduce human illnesses from *Salmonella* by 25 percent and *Campylobacter* by 33 percent [3] by the year 2020. This guideline can assist establishments in meeting these (and existing poultry carcass) performance standards, thereby resulting in a reduction in human illnesses.

FSIS encourages establishments to follow this guideline. This guideline represents FSIS's current thinking, and FSIS will update it as necessary to reflect comments received and any additional information that becomes available.

USDA Nondiscrimination Statement

No agency, officer, or employee of the USDA shall, on the grounds of race, color, national origin, religion, sex, gender identity, sexual orientation, disability, age, marital status, family/parental status, income derived from a public assistance program, or political beliefs, exclude from participation in, deny the benefits of, or subject to discrimination any person in the United States under any program or activity conducted by the USDA.

To file a complaint of discrimination, complete the USDA Program Discrimination Complaint Form, which may be accessed online at *http://www.ocio.usda.gov/sites/default/files/docs/2012/Complain_combined_6_8_12.pdf,* or write a letter signed by you or your authorized representative.

Send your completed complaint form or letter to USDA by mail, fax, or email:

Mail: U.S. Department of Agriculture, Director, Office of Adjudication, 1400 Independence Avenue SW., Washington, DC 20250–9410.

Fax: (202) 690–7442.

Email: program.intake@usda.gov.

Persons with disabilities who require alternative means for communication (Braille, large print, audiotape, etc.) should contact USDA's TARGET Center at (202) 720–2600 (voice and TDD).

Additional Public Notification

FSIS will announce this notice online through the FSIS Web page located at *http://www.fsis.usda.gov/federal-register.*

FSIS will also make copies of this **Federal Register** publication available through the FSIS Constituent Update, which is used to provide information regarding FSIS policies, procedures, regulations, **Federal Register** notices, FSIS public meetings, and other types of information that could affect or would be of interest to constituents and stakeholders. The Update is communicated via Listserv, a free electronic mail subscription service for industry, trade groups, consumer interest groups, health professionals, and other individuals who have asked to be included. The Update is also available on the FSIS Web page. In addition, FSIS offers an electronic mail subscription service which provides automatic and customized access to selected food safety news and information. This service is available at *http://www.fsis.usda.gov/subscribe.* Options range from recalls to export information to regulations, directives, and notices. Customers can add or delete subscriptions themselves, and have the option to password protect their accounts.

Done at Washington, DC, on December 11, 2015.

Alfred V. Almanza,

Acting Administrator.

[FR Doc. 2015–31628 Filed 12–15–15; 8:45 am]

BILLING CODE 3410–DM–P

[1] Available at *http://www.gao.gov/products/GAO-14-744.*

[2] 80 FR 3940; Jan. 16, 2015.

[3] Because the prevalence for NRTE comminuted turkey is especially low, the highest practical reduction for this product was estimated to be 19 percent. Therefore, for this one pathogen-product pair, NRTE comminuted turkey and *Campylobacter,* FSIS proposed a reduction less than its stated goal.

DEPARTMENT OF AGRICULTURE

Food and Nutrition Service

Agency Information Collection Activities: Proposed Collection; Comment Request—Summer Food Service Program

AGENCY: Food and Nutrition Service, USDA.

ACTION: Notice.

SUMMARY: In accordance with the Paperwork Reduction Act of 1995, this notice invites the general public and other public agencies to comment on the Agency's proposed information collection for the Summer Food Service Program. This collection is a revision of

a currently approved information collection.

DATES: Written comments must be received on or before February 16, 2016.

ADDRESSES: Comments are invited on: (1) Whether the proposed collection of information is necessary for the proper performance of the Agency's functions, including whether the information will have practical utility; (2) the accuracy of the Agency's estimate of the proposed information collection burden, including the validity of the methodology and assumptions used; (3) ways to enhance the quality, utility and clarity of the information to be collected; and (4) ways to minimize the burden of the collection of information on those who are to respond, including use of appropriate automated, electronic, mechanical, or other technological collection techniques or other forms of information technology.

Comments may be sent to Lynn Rodgers-Kuperman, Program Monitoring Branch, Program Monitoring and Operational Support Division, Child Nutrition Programs, 3101 Park Center Drive, Alexandria, VA 22302. Comments will also be accepted through the Federal eRulemaking Portal. Go to *http://www.regulations.gov,* and follow the online instructions for submitting comments electronically.

All responses to this notice will be summarized and included in the request for Office of Management and Budget (OMB) approval. All comments will also become a matter of public record.

FOR FURTHER INFORMATION CONTACT: Requests for additional information or copies of this information collection should be directed to Lynn Rodgers-Kuperman, Program Monitoring Branch, Program Monitoring and Operational Support Division, Child Nutrition Programs, 3101 Park Center Drive, Alexandria, VA 22302.

SUPPLEMENTARY INFORMATION:

Title: Information Collection for the Summer Food Service Program (SFSP).

OMB Number: 0584–0280.

Expiration Date: March 31, 2016.

Type of Request: Revision of a currently approved collection.

Abstract: SFSP is authorized under section 13 of the Richard B. Russell National School Lunch Act (NSLA) (42 U.S.C. 1761). The SFSP is directed toward children in low-income areas when school is not in session and is operated locally by approved sponsors. Local sponsors may include public or private non-profit school food authorities (SFAs), public or private non-profit residential summer camps, units of local, municipal, county or State governments, or other private non-profit organizations that develop a special summer program and provide meal service similar to that available to children during the school year under the National School Lunch Program (NSLP) and the School Breakfast Program (SBP).

This is a revision of a currently approved collection. It revises reporting burden as a result of an increase in participating sponsors. Current OMB inventory for this collection includes Reporting and Recordkeeping burden and that consists of 175,391 hours. The reporting burden was slightly increased from 139,989 to 150,646 and Record keeping burden was increased from 35,402 to 43,758. This collection is requesting a total increase of 19, 012 burden hours. FNS 418 is no longer a part of this collection as it has been listed under a separate collection (0584–0594). The average burden per response and the annual burden hours for reporting and recordkeeping are explained below and summarized in the charts which follow.

Affected Public: State Agencies, Camps and Other Sites and Households.

Estimated Number of Respondents: 106,621.

Estimated Number of Responses per Respondent: 7.35195.

Estimated Total Annual Responses: 783,872.

Estimate Time per Response: 0.248005.

Estimated Total Annual Burden: 194,403.

Current OMB Inventory: 175,391.

Difference (Burden Revisions Requested): 19,012.

Refer to the table below for estimated total annual burden for each type of respondent.

Affected public	Est. number of respondents	Number of responses per respondent	Total annual responses	Est. total hours per response	Est. total burden
Reporting					
State Agencies	53	418	22,154	0.704	15,595
Sponsors	5,317	3	14,726	4.037	59,444
Camps and Other Sites	662	1	662	.25	166
Households	100,589	2	201,178	.375	75,442
Total Estimated Reporting Burden	106,621	2.23895	238,720	.631058	150,646
Recordkeeping					
State Agencies	53	141	7,473	.080	598
Sponsors	5,317	101	537,017	.08	42,961
Camps and Other Sites	662	1	662	.300	199
Total Estimated Record keeping Burden	6,032	90.37666	545,152	0.080267	43,758
Total of Reporting and Recordkeeping					
Reporting	106,621	2.238959	238,720	.631058	150,646
Recordkeeping	6,032	90.37666	545,152	.0802672	43,758
Total	106,621	7.35195	783,872	.248005	194,403

Dated: December 8, 2015.

Audrey Rowe,

Administrator, Food and Nutrition Service.

[FR Doc. 2015–31614 Filed 12–15–15; 8:45 am]

BILLING CODE 3410–30–P

DEPARTMENT OF AGRICULTURE

Food and Nutrition Service

Emergency Food Assistance Program; Availability of Foods for Fiscal Year 2016

AGENCY: Food and Nutrition Service, USDA.

ACTION: Notice.

SUMMARY: This notice announces the surplus and purchased foods that the Department expects to make available for donation to States for use in providing nutrition assistance to the needy under The Emergency Food Assistance Program (TEFAP) in Fiscal Year (FY) 2016. The foods made available under this notice must, at the discretion of the State, be distributed to eligible recipient agencies (ERAs) for use in preparing meals and/or for distribution to households for home consumption.

DATES: *Effective Date:* October 1, 2015.

FOR FURTHER INFORMATION CONTACT: Jeramia Garcia, Policy Branch, Food Distribution Division, Food and Nutrition Service, U.S. Department of Agriculture, 3101 Park Center Drive, Alexandria, Virginia 22302–1594; or telephone (703) 305–2662.

SUPPLEMENTARY INFORMATION:

In accordance with the provisions set forth in the Emergency Food Assistance Act of 1983 (EFAA), 7 U.S.C. 7501, *et seq.,* and Section 27 of the Food and Nutrition Act of 2008, 7 U.S.C. 2036, the Department makes foods available to States for use in providing nutrition assistance to those in need through TEFAP. In accordance with section 214 of the EFAA, 7 U.S.C. 7515, 60 percent of each State's share of TEFAP foods is based on the number of people with incomes below the poverty level within the State and 40 percent on the number of unemployed persons within the State. State officials are responsible for establishing the network through which the foods will be used by ERAs in providing nutrition assistance to those in need, and for allocating foods among those ERAs. States have full discretion in determining the amount of foods that will be made available to ERAs for use in preparing meals and/or for distribution to households for home consumption.

The types of foods the Department expects to make available to States for distribution through TEFAP in FY 2016 are described below.

Surplus Foods

Surplus foods donated for distribution under TEFAP are Commodity Credit Corporation (CCC) foods purchased under the authority of section 416 of the Agricultural Act of 1949, 7 U.S.C. 1431 (section 416) and foods purchased under the surplus removal authority of section 32 of the Act of August 24, 1935, 7 U.S.C. 612c (section 32). The types of foods typically purchased under section 416 include dairy, grains, oils, and peanut products. The types of foods purchased under section 32 include meat, poultry, fish, vegetables, dry beans, juices, and fruits.

Approximately $195.7 million in surplus foods acquired in FY 2015 are being delivered to States in FY 2016. These foods include applesauce, cranberry sauce, dried cranberries, cranberry juice, orange juice, apple juice, apples, cherries, raisins, chicken leg quarters, lamb, and salmon. Other surplus foods may be made available to TEFAP throughout the year. The Department would like to point out that food acquisitions are based on changing agricultural market conditions; therefore, the availability of foods is subject to change.

Purchased Foods

In accordance with section 27 of the Food and Nutrition Act of 2008, 7 U.S.C. 2036, the Secretary is directed to purchase an estimated $319.75 million worth of foods in FY 2016 for distribution through TEFAP. These foods are made available to States in addition to those surplus foods which otherwise might be provided to States for distribution under TEFAP.

For FY 2016, the Department anticipates purchasing the following foods for distribution through TEFAP: Fresh and dehydrated potatoes, fresh apples, fresh pears, frozen apple slices, unsweetened applesauce, dried plums, raisins, frozen ground beef, frozen whole chicken, frozen ham, frozen catfish, frozen turkey roast, lima beans, black-eye beans, garbanzo beans, great northern beans, light red kidney beans, pinto beans, lentils, egg mix, shell eggs, peanut butter, roasted peanuts, low-fat cheese, one percent ultra high temperature fluid milk, vegetable oil, low-fat bakery flour mix, egg noodles, white and yellow corn grits, whole grain oats, macaroni, spaghetti, whole grain rotini, whole grain spaghetti, whole grain macaroni, white and brown rice, corn flakes, wheat bran flakes, oat cereal, rice cereal, corn cereal, corn and rice cereal, and shredded whole wheat cereal; the following canned items: Low sodium blackeye beans, low sodium green beans, low sodium light red kidney beans, low sodium refried beans, low sodium vegetarian beans, low sodium carrots, low sodium cream corn, no salt added whole kernel corn, low sodium peas, low sodium sliced potatoes, no salt added pumpkin, reduced sodium cream of chicken soup, reduced sodium cream of mushroom soup, low sodium tomato soup, low sodium vegetable soup, low sodium spaghetti sauce, low sodium spinach, sweet potatoes with extra light syrup, no salt added diced tomatoes, low sodium tomato sauce, kosher and halal tomato sauce, low sodium mixed vegetables, unsweetened applesauce, apricots with extra light syrup, mixed fruit with extra light syrup, cling peaches with extra light syrup, pears with extra light syrup, beef, beef stew, chicken, pork, salmon and kosher salmon, and tuna; and the following bottled juices: Unsweetened apple juice, unsweetened cherry apple juice, unsweetened cran-apple juice, unsweetened grape juice, unsweetened grapefruit juice, unsweetened orange juice, and unsweetened tomato juice.

The amounts of each item purchased will depend on the prices the Department must pay, as well as the quantity of each item requested by the States. Changes in agricultural market conditions may result in the availability of additional types of foods or the non-availability of one or more types listed above.

Dated: December 8, 2015.

Audrey Rowe,

Administrator, Food and Nutrition Service.

[FR Doc. 2015–31616 Filed 12–15–15; 8:45 am]

BILLING CODE 3410–30–P

BROADCASTING BOARD OF GOVERNORS

Government in the Sunshine Act Meeting Change Notice

DATE AND TIME: Wednesday, December 16, 2015, 9:15 a.m.–11:30 a.m. EST.

PLACE: Cohen Building, Room 3321, 330 Independence Ave. SW., Washington, DC 20237.

SUBJECT: Notice of Meeting Change of the Broadcasting Board of Governors.

SUMMARY: The Broadcasting Board of Governors (Board) previously announced that it will be meeting at the time and location listed above. The subject matter of the meeting has been changed to add the discussion and

consideration of Internet Freedom framework and governance documents.

The prompt and orderly conduct of business required this change and no earlier announcement was possible.

This meeting will be available for public observation via streamed webcast, both live and on-demand, on the agency's public Web site at *www.bbg.gov.* Information regarding this meeting, including any updates or adjustments to its starting time, can also be found on the agency's public Web site.

The public may also attend this meeting in person at the address listed above as seating capacity permits. Members of the public seeking to attend the meeting in person must register at *http://bbgboardmeetingdecember 2015.eventbrite.com* by 12:00 p.m. (EST) on December 15. For more information, please contact BBG Public Affairs at (202) 203–4400 or by email at *pubaff@bbg.gov.*

CONTACT PERSON FOR MORE INFORMATION: Persons interested in obtaining more information should contact Oanh Tran at (202) 203–4545.

Oanh Tran,

Director of Board Operations.

[FR Doc. 2015–31780 Filed 12–14–15; 4:15 pm]

BILLING CODE 8610–01–P

DEPARTMENT OF COMMERCE

International Trade Administration

[A–570–836]

Glycine From the People's Republic of China: Notice of Amended Final Results of Antidumping Duty Administrative Review Pursuant to Settlement; 2012–2013

AGENCY: Enforcement and Compliance, International Trade Administration, Department of Commerce.

SUMMARY: The Department of Commerce (the Department) is amending the final results of the 2012–2013 antidumping administrative review of glycine from the People's Republic of China (PRC) with respect to Evonik Rexim (Nanning) Pharmaceutical Co., Ltd. and Evonik Rexim S.A.S. (collectively, Evonik) pursuant to an agreement that settles the related litigation.

DATES: Effective date: December 16, 2015.

FOR FURTHER INFORMATION CONTACT: Edythe Artman or Brian Davis, AD/CVD Operations, Office VI, Enforcement and Compliance, International Trade Administration, U.S. Department of Commerce, 14th Street and Constitution Avenue NW., Washington, DC 20230; telephone: (202) 482–3931 or (202) 482–7924, respectively.

SUPPLEMENTARY INFORMATION:

Background

On March 29, 1995, the Department published the antidumping duty order on glycine from the PRC.[1] On October 31, 2014, the Department published the final results of its administrative review of the *Order.*[2] The period of review (POR) is March 1, 2012, through February 28, 2013. In the *Final Results,* the Department assigned Evonik, an exporter of the subject merchandise from the PRC to the United States, the rate assigned to the PRC-wide entity of 453.79 percent for the POR.

Following the publication of the *Final Results,* Evonik filed a lawsuit with the CIT challenging the Department's final results of administrative review. The United States and Evonik have now entered into an agreement to settle this dispute. The Court issued its Order of Judgment by Stipulation on November 16, 2015.[3]

Assessment of Duties

Pursuant to the Court's Order of Judgment by Stipulation, the Department shall instruct Customs and Border Protection (CBP) to assess antidumping duties on all shipments of glycine from the PRC, which were entered, or withdrawn from warehouse, for consumption during the period March 1, 2012, through February 28, 2013, and that were exported by Evonik at a rate of 155.89 percent. The Department intends to issue assessment instructions to CBP within 15 days after the date of publication of these amended final results of the review in the **Federal Register**.

Cash Deposit Requirements

As stipulated in the Court's Order of Judgement by Stipulation, the order has no effect on entries not made during the POR and does not establish a revised cash deposit rate for Evonik.

Notification to Importers

This notice also serves as a final reminder to importers of their responsibility under 19 CFR 351.402(f) to file a certificate regarding the reimbursement of antidumping duties prior to liquidation of the relevant entries during this review period. Failure to comply with this requirement could result in the Secretary's presumption that reimbursement of antidumping duties occurred, and the subsequent assessment of double antidumping duties.

We are issuing this determination and publishing these amended final results of antidumping duty administrative review pursuant to the Court's Order of Judgment by Stipulation.

Dated: December 9, 2015.

Paul Piquado,

Assistant Secretary for Enforcement and Compliance.

[FR Doc. 2015–31630 Filed 12–15–15; 8:45 am]

BILLING CODE 3510–DS–P

[1] *See Glycine from the People's Republic of China: Antidumping Duty Order,* 60 FR 16116 (March 29, 1995) (*Order*).

[2] *See Glycine from the People's Republic of China: Final Results of Antidumping Duty Administrative Review; 2012–2013,* 79 FR 64746 (October 31, 2014) (*Final Results*).

[3] *See Evonik Rexim (Nanning) Pharmaceutical Co. Ltd. et al* v. *United States,* Court No. 14–00296, Order of Judgment by Stipulation (November 16, 2015).

DEPARTMENT OF COMMERCE

International Trade Administration

U.S. Education Mission to Africa: South Africa and Ghana (Optional Stop to Cote d'Ivoire); March 6–12, 2016

AGENCY: International Trade Administration, Department of Commerce.

ACTION: Notice.

SUMMARY: The United States Department of Commerce, International Trade Administration, is organizing an education mission to South Africa and Ghana with an optional stop in the Côte d'Ivoire. Department of Commerce is partnering with the Department of State's EducationUSA Advising Centers in each location. This trade mission will be led by a senior Department of Commerce official and the emphasis will be on higher education programs, community college programs and summer, undergraduate and graduate programs, or consortia/associations of U.S. educational institutions offering said programs.

This mission will seek to connect U.S. higher education institutions to potential students and university/institution partners in these three African countries. The mission will include student fairs organized by Education USA, embassy briefings, site visits, and networking events in our target cities of Johannesburg, Accra, and Abidjan. Participation in the Education Mission to these nations, rather than traveling independently to each market, will enhance the ability of participants to secure appropriate meetings with productive contacts in the target markets.

This mission is intended to include representatives from a variety of accredited U.S. education institutions and consortia/associations representing groupings of U.S. accredited education institutions.

Summer programs seeking to participate should be appropriately accredited by an accreditation body recognized by the U.S. Department of Education. Community colleges, undergraduate and graduate programs seeking to participate should be accredited by a recognized accreditation body listed in Council for Higher Education Accreditation (CHEA) or Accrediting Council for Education and Training (ACCET), in the Association of Specialized and Professional Accreditors (ASPA), or any accrediting body recognized by the U.S. Department of Education.

The delegation will include representatives from approximately 25 different educational institutions or consortia/associations.

SCHEDULE

Sunday March 6, 2016.	• Arrive in Johannesburg • Check into hotel
Monday March 7, 2016.	• Welcome and Briefing from the U.S. and Foreign Commercial Service • Meeting with South African Government Education Leaders • Visit to Schools • Networking Reception
Tuesday March 8, 2016.	• Education Fair
Wednesday March 9, 2016.	• Visit to Africa Leadership Academy • Additional Meetings with Schools • Travel to Accra
Thursday March 10, 2016.	• Travel Recovery • Welcome and Briefing from the U.S. and Foreign Commercial Service • Education Fair • Reception at U.S. Ambassador's Residence
Friday March 11, 2016.	• Visit to Schools (Accra) • Depart for Abidjan, Cote d'Ivoire for optional stop or return to United States on own itinerary • Arrive in Abidjan in afternoon • Evening Reception
Saturday March 12, 2016.	• Welcome and Briefing from the U.S. Department of State (EducationUSA) • Brunch with Local Schools and University Directors • Education Fair: 12:30–6:00 PM • Reception with Dinner and Cultural Show
Monday March 13, 2016.	• Optional cultural excursion for those who can stay • Departure to the United States (most flights depart in the afternoon or evening)

Web site: Please visit our official mission Web site for more information: *http://www.export.gov/trademissions/*.

Participation Requirements

All parties interested in participating in the Education Trade Mission to Africa must complete and submit an application package for consideration by the Department of Commerce. All applicants will be evaluated on their ability to meet certain conditions and best satisfy the selection criteria as outlined below. The mission will open on a rolling basis to a minimum of 20 and a maximum of 25 appropriately accredited U.S. educational institutions. U.S. educational institutions (or associations/consortia thereof) already recruiting in Africa, as well as U.S. education institutions seeking to enter the African market for the first time, may apply.

Fees and Expenses

After an institution has been selected to participate on the mission, a payment to the Department of Commerce in the form of a participation fee is required. The participation fee is $2,800 for one principal representative from each non-profit educational institution or educational institution with fewer than 500 employees and $3,300 for for-profit universities with over 500 employees. An institution can choose to participate in the optional stop in Cote d'Ivoire for an additional $1,800 for one principal representative from each non-profit educational institution or educational institution with fewer than 500 employees and $1,900 for for-profit universities with over 500 employees. The fee for each additional representative is $600. Expenses for lodging, some meals, incidentals, and all travel (except for transportation to and from airports in-country, previously noted) will be the responsibility of each mission participant. The U.S. Department of Commerce can facilitate government rates in some hotels.

Application

All interested firms and associations may register via the following link: *http://emenuapps.ita.doc.gov/ePublic/TM/6R0R*.

Exclusions

The mission fee does not include any personal travel expenses such as lodging, most meals, local ground transportation, except as stated in the proposed agenda, and air transportation from the United States to the mission site and return to the United States.

Timeline for Recruitment and Applications

Mission recruitment will be conducted in an open and public manner, including publication in the **Federal Register**, posting on the Commerce Department trade mission calendar (*http://export.gov/industry/education/*) and other Internet Web sites, press releases to general and trade media, direct mail, notices by industry trade associations and other multiplier groups, and publicity at industry meetings, symposia, conferences, and trade shows. Recruitment for the mission will begin immediately and conclude no later than January 15, 2016. Applications for the mission will be accepted on a rolling basis. Applications received after January 15, 2016, will be considered only if space and scheduling constraints permit.

Conditions for Participation

An applicant must submit a timely, completed and signed mission application and supplemental application materials, including adequate information on course offerings, primary market objectives, and goals for participation. The institution or institutional members of consortia/associations must have appropriate accreditation as specified per paragraph one above.

The institution/consortium/association must be represented at the student fair by an employee of an accredited U.S. educational institution or association/consortium. No agents will be allowed to represent a school on the mission or participate at the student fair. Agents will also not be allowed into the fairs to solicit new partnerships. If the Department of Commerce receives an incomplete application, the Department may reject the application, request additional information, or take the lack of information into account when evaluating the applications.

Participants must travel to both stops in South Africa and Ghana on the mission. Côte d'Ivoire is the only optional stop.

Each applicant must certify that the services it seeks to export through the mission are either produced in the United States, or, if not, marketed under the name of a U.S. firm and have at least 51 percent U.S. content of the value of the service.

FOR FURTHER INFORMATION CONTACT:

Jennifer Woods, Senior International Trade Specialist, U.S Commercial

Service, Portland, Oregon, Tel: (503) 326–5290, Email: *jennifer.woods@trade.gov.*

Jeffrey Goldberg, Industry & Analysis, Office of Trade Promotion Programs, Washington, DC, Tel: (202) 482–1706, Email: *jeffrey.goldberg@trade.gov.*

Frank Spector,

Acting Director, Trade Missions Program.

[FR Doc. 2015–31584 Filed 12–15–15; 8:45 am]

BILLING CODE 3510–DR–P

DEPARTMENT OF COMMERCE

International Trade Administration

Limitation of Duty-Free Imports of Apparel Articles Assembled in Haiti Under the Caribbean Basin Economic Recovery Act (CBERA), as Amended by the Haitian Hemispheric Opportunity Through Partnership Encouragement Act (HOPE)

AGENCY: International Trade Administration, U.S. Department of Commerce.

ACTION: Notification of Annual Quantitative Limit on Imports of Certain Apparel from Haiti.

SUMMARY: CBERA, as amended, provides duty-free treatment for certain apparel articles imported directly from Haiti. One of the preferences is known as the ''value-added'' provision, which requires that apparel meet a minimum threshold percentage of value added in Haiti, the United States, and/or certain beneficiary countries. The provision is subject to a quantitative limitation, which is calculated as a percentage of total apparel imports into the United States for each 12-month annual period. For the annual period from December 20, 2015 through December 19, 2016, the quantity of imports eligible for preferential treatment under the value-added provision is 350,962,661 square meters equivalent.

DATED: *Effective Date:* December 20, 2015.

FOR FURTHER INFORMATION CONTACT: Laurie Mease, International Trade Specialist, Office of Textiles and Apparel, U.S. Department of Commerce, (202) 482–3400.

SUPPLEMENTARY INFORMATION:

Authority: Section 213A of the Caribbean Basin Economic Recovery Act (19 U.S.C. 2703a)

(''CBERA''), as amended by the Haitian Hemispheric Opportunity through Partnership Encouragement Act of 2006 (''HOPE'') (Title V of the Tax Relief and Health Care Act of 2006), the Haitian Hemispheric Opportunity through Partnership Encouragement Act of 2008 (''HOPE II'') (Subtitle D of Title XV of the Food, Conservation, and Energy Act of 2008), the Haiti Economic Lift Program Act of 2010 (''HELP''), and the Trade Preferences Extension Act of 2015; and as implemented by Presidential Proc. No. 8114, 72 FR 13655 (March 22, 2007), and No. 8596, 75 FR 68153 (November 4, 2010).

Background: Section 213A(b)(1)(B) of CBERA, as amended (19 U.S.C. 2703a(b)(1)(B)), outlines the requirements for certain apparel articles imported directly from Haiti to qualify for duty-free treatment under a ''value-added'' provision. In order to qualify for duty-free treatment, apparel articles must be wholly assembled, or knit-to-shape, in Haiti from any combination of fabrics, fabric components, components knit-to-shape, and yarns, as long as the sum of the cost or value of materials produced in Haiti or one or more beneficiary countries, as described in CBERA, as amended, or any combination thereof, plus the direct costs of processing operations performed in Haiti or one or more beneficiary countries, as described in CBERA, as amended, or any combination thereof, is not less than an applicable percentage of the declared customs value of such apparel articles. Pursuant to CBERA, as amended, the applicable percentage for the period December 20, 2015 through December 19, 2016 is 55 percent. For every 12-month period following the effective date of CBERA, as amended, duty-free treatment under the value-added provision is subject to a quantitative limitation. CBERA, as amended, provides that the quantitative limitation will be recalculated for each subsequent 12- month period. Section 213A (b)(1)(C) of CBERA, as amended (19 U.S.C. 2703a(b)(1)(C)), requires that, for the 12-month period beginning on December 20, 2015, the quantitative limitation for qualifying apparel imported from Haiti under the value-added provision will be an amount equivalent to 1.25 percent of the aggregate square meter equivalent of all apparel articles imported into the United States in the most recent 12-month period for which data are available. The aggregate square meters equivalent of all apparel articles imported into the United States is derived from the set of Harmonized System lines listed in the Annex to the World Trade Organization Agreement on Textiles and Clothing (''ATC''), and the conversion factors for units of measure into square meter equivalents used by the United States in implementing the ATC. For purposes of this notice, the most recent 12-month period for which data are available as of December 20, 2015 is the 12-month period ending on October 31, 2015.

Therefore, for the one-year period beginning on December 20, 2015 and extending through December 19, 2016, the quantity of imports eligible for preferential treatment under the value-added provision is 350,962,661 square meters equivalent. Apparel articles entered in excess of these quantities will be subject to otherwise applicable tariffs.

Dated: December 10, 2015.

Joshua Teitelbaum,

Deputy Assistant Secretary for Textiles, Consumer Goods and Materials.

[FR Doc. 2015–31598 Filed 12–15–15; 8:45 am]

BILLING CODE 3510–DR–P

DEPARTMENT OF COMMERCE

National Oceanic and Atmospheric Administration

RIN 0648–XE339

Fisheries of the Exclusive Economic Zone Off Alaska; North Pacific Halibut and Sablefish Individual Fishing Quota Cost Recovery Programs

AGENCY: National Marine Fisheries Service (NMFS), National Oceanic and Atmospheric Administration (NOAA), Commerce.

ACTION: Notice of standard prices and fee percentage.

SUMMARY: NMFS publishes individual fishing quota (IFQ) standard prices and fee percentage for cost recovery for the IFQ Program for the halibut and sablefish fisheries of the North Pacific (IFQ Program). The fee percentage for 2015 is 3.0 percent. This action is intended to provide holders of halibut and sablefish IFQ permits with the 2015 standard prices and fee percentage to calculate the required payment for IFQ cost recovery fees due by January 31, 2016.

DATES: Effective December 16, 2015.

FOR FURTHER INFORMATION CONTACT: Kristie Balovich, Fee Coordinator, 907–586–7105.

SUPPLEMENTARY INFORMATION:

Background

NMFS Alaska Region administers the halibut and sablefish individual fishing quota (IFQ) program in the North Pacific. The IFQ Program is a limited access system authorized by the Magnuson-Stevens Fishery

Conservation and Management Act (Magnuson-Stevens Act) and the Northern Pacific Halibut Act of 1982. Fishing under the IFQ Program began in March 1995. Regulations implementing the IFQ Program are set forth at 50 CFR part 679.

In 1996, the Magnuson-Stevens Act was amended to, among other purposes, require the Secretary of Commerce to ''collect a fee to recover the actual costs directly related to the management and enforcement of any . . . individual quota program.'' This requirement was further amended in 2006 to include collection of the actual costs of data collection, and to replace the reference to ''individual quota program'' with a more general reference to ''limited access privilege program'' at section 304(d)(2)(A). Section 304(d)(2) of the Magnuson-Stevens Act also specifies an upper limit on these fees, when the fees must be collected, and where the fees must be deposited.

On March 20, 2000, NMFS published regulations in § 679.45 implementing cost recovery for the IFQ Program (65 FR 14919). Under the regulations, an IFQ permit holder incurs a cost recovery fee liability for every pound of IFQ halibut and IFQ sablefish that is landed on his or her IFQ permit(s). The IFQ permit holder is responsible for self-collecting the fee liability for all IFQ halibut and IFQ sablefish landings on his or her permit(s). The IFQ permit holder is also responsible for submitting IFQ fee liability payment(s) to NMFS on or before the due date of January 31 of the year following the year in which the IFQ landings were made. The total dollar amount of the fee due is determined by multiplying the NMFS published fee percentage by the ex-vessel value of all IFQ landings made on the permit(s) during the IFQ fishing year. As required by regulations at § 679.45(d)(1) and (d)(3)(i), NMFS publishes this notice of the fee percentage for the halibut and sablefish IFQ fisheries in the **Federal Register** during or before the last quarter of each year.

Standard Prices

The fee liability is based on the sum of all payments made to fishermen for the sale of the fish during the year. This includes any retro-payments (*e.g.,* bonuses, delayed partial payments, post-season payments) made to the IFQ permit holder for previously landed IFQ halibut or sablefish.

For purposes of calculating IFQ cost recovery fees, NMFS distinguishes between two types of ex-vessel value: actual and standard. Actual ex-vessel value is the amount of all compensation, monetary or non-monetary, that an IFQ permit holder received as payment for his or her IFQ fish sold. Standard ex-vessel value is the default value used to calculate the fee liability. IFQ permit holders have the option of using actual ex-vessel value if they can satisfactorily document it; otherwise, the standard ex-vessel value is used.

The regulation at § 679.45(b)(3)(iii) requires the Regional Administrator to publish IFQ standard prices during the last quarter of each calendar year. These standard prices are used, along with estimates of IFQ halibut and IFQ sablefish landings, to calculate standard ex-vessel values. The standard prices are described in U.S. dollars per IFQ equivalent pound for IFQ halibut and IFQ sablefish landings made during the year. According to § 679.2, IFQ equivalent pound(s) means the weight amount, recorded in pounds, and calculated as round weight for sablefish and headed and gutted weight for halibut, for an IFQ landing. The weight of halibut in pounds landed as guided angler fish (GAF) is converted to IFQ equivalent pound(s) as specified in § 300.65(c) of this title. NMFS calculates the standard prices to closely reflect the variations in the actual ex-vessel values of IFQ halibut and IFQ sablefish landings by month and port or port-group. The standard prices for IFQ halibut and IFQ sablefish are listed in the tables that follow the next section. Data from ports are combined as necessary to protect confidentiality.

Fee Percentage

NMFS calculates the fee percentage each year according to the factors and methods described in Federal regulations at § 679.45(d)(2). NMFS determines the fee percentage that applies to landings made in the previous year by dividing the total costs directly related to the management, data collection, and enforcement of the IFQ Program (management costs) during the previous year by the total standard ex-vessel value of IFQ halibut and IFQ sablefish landings made during the previous year (fishery value). NMFS captures the actual management costs associated with certain management, data collection, and enforcement functions through an established accounting system that allows staff to track labor, travel, contracts, rent, and procurement. NMFS calculates the fishery value as described under the section, Standard Prices.

Using the fee percentage formula described above, the estimated percentage of management costs to fishery value for the 2015 calendar year is 3.0 percent of the standard ex-vessel value. An IFQ permit holder is to use the fee liability percentage of 3.0 percent to calculate his or her fee for IFQ equivalent pound(s) landed during the 2015 halibut and sablefish IFQ fishing season. An IFQ permit holder is responsible for submitting the 2015 IFQ fee liability payment to NMFS on or before January 31, 2016. Payment must be made in accordance with the payment methods set forth in 679.45(a)(4). NMFS will no longer accept credit card information by phone or in-person for fee payments. NMFS has determined that the practice of accepting credit card information by phone or in-person no longer meets agency standards for protection of personal financial information.

The 2015 fee liability percentage of 3.0 percent is an increase of 0.4 percent from the 2014 fee liability of 2.6 percent (79 FR 73045, December 9, 2014). The change in the fee percentage between 2014 and 2015 can be attributed to a 23.5 percent increase in management costs. NMFS, the Alaska Department of Fish and Game (ADF&G), and the International Pacific Halibut Commission (IPHC) incurred higher costs in 2015 due to addition of staff (NOAA Office of Law Enforcement), additional costs to maintain the interagency Internet-based landings system used for the IFQ Program (NMFS and ADF&G), and increased costs for the port sampling program (IPHC). The value of halibut and sablefish harvests under the IFQ Program also increased by 4 percent from 2014 to 2015. This increase in value of the fishery offset some of the increase in management costs, which limited the change in the fee percentage between 2014 and 2015.

TABLE 1—REGISTERED BUYER STANDARD EX-VESSEL PRICES BY LANDING LOCATION FOR THE 2015 IFQ SEASON [1]

Landing location	Period ending	Halibut standard ex-vessel price	Sablefish Standard Ex-vessel price
CORDOVA			
	March 31		
	April 30	6.26	
	May 31	6.30	
	June 30		
	July 31	7.22	
	August 31	6.80	
	September 30		
	October 31		
	November 30		
HOMER			
	March 31		
	April 30	6.58	
	May 31	6.56	3.67
	June 30	6.63	3.59
	July 31	6.85	
	August 31	6.86	4.14
	September 30	6.79	3.71
	October 31	6.79	3.71
	November 30	6.79	3.71
KETCHIKAN			
	March 31		
	April 30	6.48	
	May 31	6.45	
	June 30	6.46	
	July 31	6.50	
	August 31	6.57	
	September 30	7.04	
	October 31	7.04	
	November 30	7.04	
KODIAK			
	March 31	6.24	
	April 30	6.19	3.58
	May 31	6.35	3.56
	June 30	6.46	3.50
	July 31	6.55	3.98
	August 31	6.57	3.92
	September 30	6.54	3.81
	October 31	6.54	3.81
	November 30	6.54	3.81
PETERSBURG			
	March 31		
	April 30		
	May 31	6.49	
	June 30	6.58	
	July 31	6.54	
	August 31	6.79	
	September 30	6.84	
	October 31	6.84	
	November 30	6.84	
PORT GROUP BERING SEA [2]			
	March 31		
	April 30	4.91	
	May 31	5.79	2.75
	June 30	5.39	3.68
	July 31	5.59	2.87
	August 31	6.00	3.10
	September 30	5.75	3.28
	October 31	5.75	3.28
	November 30	5.75	3.28
PORT GROUP CENTRAL GULF [3]			
	March 31	6.27	3.68
	April 30	6.37	3.73
	May 31	6.42	3.64
	June 30	6.53	3.57
	July 31	6.83	3.89
	August 31	6.72	3.90
	September 30	6.65	3.85
	October 31	6.65	3.85

TABLE 1—REGISTERED BUYER STANDARD EX-VESSEL PRICES BY LANDING LOCATION FOR THE 2015 IFQ SEASON [1]—Continued

Landing location	Period ending	Halibut standard ex-vessel price	Sablefish Standard Ex-vessel price
	November 30	6.65	3.85
PORT GROUP SOUTHEAST [4]			
	March 31	6.46	3.62
	April 30	6.50	3.71
	May 31	6.50	4.07
	June 30	6.59	4.17
	July 31	6.58	4.19
	August 31	6.80	4.41
	September 30	6.77	4.13
	October 31	6.77	4.13
	November 30	6.77	4.13
ALL [5]			
	March 31	6.41	3.63
	April 30	6.37	3.72
	May 31	6.38	3.77
	June 30	6.33	3.77
	July 31	6.55	3.79
	August 31	6.54	3.89
	September 30	6.52	3.91
	October 31	6.52	3.91
	November 30	6.52	3.91

[1] Note: In many instances prices have not been reported to comply with confidentiality guidelines that prevent price reports when there are fewer than three processors operating in a location during a month.

[2] *Landing locations Within Port Group—Bering Sea:* Adak, Akutan, Akutan Bay, Atka, Bristol Bay, Chefornak, Dillingham, Captains Bay, Dutch Harbor, Egegik, Ikatan Bay, Hooper Bay, King Cove, King Salmon, Kipnuk, Mekoryuk, Naknek, Nome, Quinhagak, Savoonga, St. George, St. Lawrence, St. Paul, Togiak, Toksook Bay, Tununak, Beaver Inlet, Ugadaga Bay, Unalaska.

[3] *Landing Locations Within Port Group—Central Gulf of Alaska:* Anchor Point, Anchorage, Alitak, Chignik, Cordova, Eagle River, False Pass, West Anchor Cove, Girdwood, Chinitna Bay, Halibut Cove, Homer, Kasilof, Kenai, Kenai River, Alitak, Kodiak, Port Bailey, Nikiski, Ninilchik, Old Harbor, Palmer, Sand Point, Seldovia, Resurrection Bay, Seward, Valdez, Whittier.

[4] *Landing Locations Within Port Group—Southeast Alaska:* Angoon, Baranof Warm Springs, Craig, Edna Bay, Elfin Cove, Excursion Inlet, Gustavus, Haines, Hollis, Hoonah, Hyder, Auke Bay, Douglas, Tee Harbor, Juneau, Kake, Ketchikan, Klawock, Metlakatla, Pelican, Petersburg, Portage Bay, Port Alexander, Port Graham, Port Protection, Point Baker, Sitka, Skagway, Tenakee Springs, Thorne Bay, Wrangell, Yakutat.

[5] *Landing Locations Within Port Group—All:* For Alaska: All landing locations included in 2, 3, and 4. For California: Eureka, Fort Bragg, Other California. For Oregon: Astoria, Aurora, Lincoln City, Newport, Warrenton, Other Oregon. For Washington: Anacortes, Bellevue, Bellingham, Nagai Island, Edmonds, Everett, Granite Falls, Ilwaco, La Conner, Port Angeles, Port Orchard, Port Townsend, Ranier, Fox Island, Mercer Island, Seattle, Standwood, Other Washington. For Canada: Port Hardy, Port Edward, Prince Rupert, Vancouver, Haines Junction, Other Canada.

Authority: 16 U.S.C. 1801 *et seq.*

Dated: December 11, 2015.

Emily H. Menashes,

Acting Director, Office of Sustainable Fisheries, National Marine Fisheries Service.

[FR Doc. 2015–31624 Filed 12–15–15; 8:45 am]

BILLING CODE 3510–22–P

DEPARTMENT OF COMMERCE

National Oceanic and Atmospheric Administration

Submission for OMB Review; Comment Request

The Department of Commerce will submit to the Office of Management and Budget (OMB) for clearance the following proposal for collection of information under the provisions of the Paperwork Reduction Act (44 U.S.C. Chapter 35).

Agency: National Oceanic and Atmospheric Administration (NOAA).

Title:

OMB Control Number: 0648–0314.

Form Number(s): None.

Type of Request: Regular (extension of a currently approved information collection).

Number of Respondents: 146.

Average Hours per Response: 1 hour to designate a principal state fishery official(s) or for a request to reinstate authority; 80 hours for a nomination for a Council appointment; 16 hours for background documentation for nominees.

Burden Hours: 4,607.

Needs and Uses: This request is for an extension of a currently approved information collection.

The Magnuson-Stevens Fishery Conservation and Management Act (Magnuson-Stevens Act), as amended in 1996, provides for the nomination for members of Fishery Management Councils by state governors and Indian treaty tribes, for the designation of a principal state fishery official who will perform duties under the Magnuson-Stevens Act, and for a request by a state for reinstatement of state authority over a managed fishery. Nominees for council membership must provide the governor or tribe with background documentation, which is then submitted to NOAA with the nomination. The information submitted with these actions will be used to ensure that the requirements of the Magnuson-Stevens Act are being met.

Affected Public: State, local and tribal governments.

Frequency: Annually.

Respondent's Obligation: Mandatory.

This information collection request may be viewed at reginfo.gov. Follow the instructions to view Department of Commerce collections currently under review by OMB.

Written comments and recommendations for the proposed information collection should be sent within 30 days of publication of this notice to *OIRA_Submission@omb.eop.gov* or fax to (202) 395–5806.

Dated: December 10, 2015.

Sarah Brabson,

NOAA PRA Clearance Officer.

[FR Doc. 2015–31592 Filed 12–15–15; 8:45 am]

BILLING CODE 3510–22–P

DEPARTMENT OF COMMERCE

National Oceanic and Atmospheric Administration

RIN 0648–XE251

Takes of Marine Mammals Incidental to Specified Activities; Taking Marine Mammals Incidental to a Test Pile Program

AGENCY: National Marine Fisheries Service (NMFS), National Oceanic and Atmospheric Administration (NOAA), Commerce.

ACTION: Notice; proposed incidental harassment authorization; request for comments.

SUMMARY: NMFS has received a request from the Municipality of Anchorage (MOA), through its Port of Anchorage (POA) department, for authorization to take marine mammals incidental to implementation of a Test Pile Program, including geotechnical characterization of pile driving sites, near its existing facility in Anchorage, Alaska. The POA requests that the IHA be valid for 1 year from April 1, 2016, through March 31, 2017. Pursuant to the Marine Mammal Protection Act (MMPA), NMFS is requesting comments on its proposal to issue an incidental harassment authorization (IHA) to POA to incidentally take marine mammals, by Level B Harassment only, during the specified activity.

DATES: Comments and information must be received no later than January 15, 2016.

ADDRESSES: Comments on the application should be addressed to Jolie Harrison, Chief, Permits and Conservation Division, Office of Protected Resources, National Marine Fisheries Service. Physical comments should be sent to 1315 East-West Highway, Silver Spring, MD 20910 and electronic comments should be sent to *ITP.Pauline@noaa.gov*.

Instructions: NMFS is not responsible for comments sent by any other method, to any other address or individual, or received after the end of the comment period. Comments received electronically, including all attachments, must not exceed a 25-megabyte file size. Attachments to electronic comments will be accepted in Microsoft Word or Excel or Adobe PDF file formats only. All comments received are a part of the public record and will generally be posted to the Internet at *http://www.nmfs.noaa.gov/pr/permits/incidental/construction.htm* without change. All personal identifying information (*e.g.,* name, address) voluntarily submitted by the commenter may be publicly accessible. Do not submit confidential business information or otherwise sensitive or protected information.

FOR FURTHER INFORMATION CONTACT: Robert Pauline, Office of Protected Resources, NMFS, (301) 427–8401.

SUPPLEMENTARY INFORMATION:

Availability

An electronic copy of POA's application and supporting documents, as well as a list of the references cited in this document, may be obtained by visiting the Internet at: *http://www.nmfs.noaa.gov/pr/permits/incidental/construction.htm*. In case of problems accessing these documents, please call the contact listed above.

Background

Sections 101(a)(5)(A) and (D) of the MMPA (16 U.S.C. 1361 *et seq.*) direct the Secretary of Commerce to allow, upon request, the incidental, but not intentional, taking of small numbers of marine mammals by U.S. citizens who engage in a specified activity (other than commercial fishing) within a specified geographical region if certain findings are made and either regulations are issued or, if the taking is limited to harassment, a notice of a proposed authorization is provided to the public for review.

An authorization for incidental takings shall be granted if NMFS finds that the taking will have a negligible impact on the species or stock(s), will not have an unmitigable adverse impact on the availability of the species or stock(s) for subsistence uses (where relevant), and if the permissible methods of taking and requirements pertaining to the mitigation, monitoring and reporting of such takings are set forth. NMFS has defined ''negligible impact'' in 50 CFR 216.103 as ''an impact resulting from the specified activity that cannot be reasonably expected to, and is not reasonably likely to, adversely affect the species or stock through effects on annual rates of recruitment or survival.''

Except with respect to certain activities not pertinent here, the MMPA defines ''harassment'' as: Any act of pursuit, torment, or annoyance which (i) has the potential to injure a marine mammal or marine mammal stock in the wild [Level A harassment]; or (ii) has the potential to disturb a marine mammal or marine mammal stock in the wild by causing disruption of behavioral patterns, including, but not limited to, migration, breathing, nursing, breeding, feeding, or sheltering [Level B harassment].

Summary of Request

On February 15, 2015, NMFS received an application from POA for the taking of marine mammals incidental to conducting a Test Pile Program as part of the Anchorage Port Modernization Project (APMP). POA submitted a revised application on November 23, 2015. NMFS determined that the application was adequate and complete on November 30, 2015. POA proposes to install a total of 10 test piles as part of a Test Pile Program to support the design of the Anchorage Port Modernization Project (APMP) in Anchorage, Alaska. The Test Pile Program will also be integrated with a hydroacoustic monitoring program to obtain data that can be used to evaluate potential environmental impacts and meet permit requirements. All pile driving is expected to be completed by July 1, 2016. However, to accommodate unexpected project delays and other unforeseeable circumstances, the requested and proposed IHA period for the Test Pile Program is for the 1-year period from April 1, 2016, to March 31, 2017. Subsequent incidental take authorizations will be required to cover pile driving under actual construction associated with the APMP. Construction is anticipated to last five years.

The use of vibratory and impact pile driving is expected to produce underwater sound at levels that have the potential to result in behavioral harassment of marine mammals. Species with the expected potential to be present during the project timeframe include harbor seals (*Phoca vitulina*), Cook Inlet beluga whales (*Delphinapterus leucas*), and harbor porpoises (*Phocoena phocoena*). Species that may be encountered infrequently or rarely within the project area are killer whales (*Orcinus orca*) and Steller sea lions (*Eumetopias jubatus*).

Description of the Specified Activity

Overview

The POA is modernizing its facilities through the APMP. Located within the MOA on Knik Arm in upper Cook Inlet (See Figure 1–1 in the Application), the existing 129-acre Port facility is currently operating at or above sustainable practicable capacity for the various types of cargo handled at the

facility. The existing infrastructure and support facilities were largely constructed in the 1960s. They are substantially past their design life, have degraded to levels of marginal safety, and are in many cases functionally obsolete, especially in regards to seismic design criteria and condition. The APMP will include construction of new pile-supported wharves and trestles to the south and west of the existing terminals, with a planned design life of 75 years.

An initial step in the APMP is implementation of a Test Pile Program, the proposed action for this IHA application. The POA proposes to install a total of 10 test piles at the POA as part of a Test Pile Program to support the design of the APMP. The Test Pile Program will also be integrated with a hydroacoustic monitoring program to obtain data that can be used to evaluate potential environmental impacts and meet permit requirements. Proposed activities included as part of the Test Pile Program with potential to affect marine mammals within the waterways adjacent to the POA include vibratory and impact pile-driving operations in the project area.

Dates and Duration

In-water work associated with the APMP Test Pile Program will begin no sooner than April 1, 2016, and will be completed no later than March 31, 2017 (1 year following IHA issuance), but is expected to be completed by July 1, 2016. Pile driving is expected to take place over 25 days and include 5 hours of vibratory driving and 17 hours of impact driving as is shown in Table 1. A 25 percent contingency has been added to account for delays due to weather or marine mammal shutdowns resulting in an estimated 6 hours of vibratory driving and 21 hours of impact driving over 31 days of installation. Restriking of some of the piles will occur two to three weeks following installation. Approximately 25 percent of pile driving will be conducted via vibratory installation, while the remaining 75 percent of pile driving will be conducted with impact hammers. Although each indicator pile test can be conducted in less than 2 hours, mobilization and setup of the barge at the test site will require 1 to 2 days per location and could be longer depending on terminal use. Additional time will be required for installation of sound attenuation measures, and for subsequent noise-mitigation monitoring. Hydroacoustic monitoring and installation of resonance-based systems or bubble curtains will likely increase the time required to install specific indicator pile from a few hours to a day or more.

Within any day, the number of hours of pile driving will vary, but will generally be low. The number of hours required to set a pile initially using vibratory methods is about 30 minutes per pile, and the number of hours of impact driving per pile is about 1.5 hours. Vibratory driving for each test pile will occur on ten separate days. Impact driving could occur on any of the 31 days depending on a number of factors including weather delays and unanticipated scheduling issues. On some days, pile driving may occur only for an hour or less as bubble curtains and the containment frames are set up and implemented, resonance-based systems are installed, hydrophones are placed, pipe segments are welded, and other logistical requirements are handled.

TABLE 1—CONCEPTUAL PROJECT SCHEDULE FOR TEST PILE DRIVING, INCLUDING ESTIMATED NUMBER OF HOURS AND DAYS FOR PILE DRIVING

Month	Pile type	Pile diameter	Number of piles	Number of hours, vibratory driving	Number of hours, impact driving	Number of days of pile driving	Number of days of restrikes	Total number of days of pile driving
April–July 2016	Steel pipe	48″ OD	10	5	17	21	4	25
				+ 25% contingency =				
				6	21	26	5	31

Notes: OD—outside diameter.

Specified Geographic Region

The Municipality of Anchorage (MOA) is located in the lower reaches of Knik Arm of upper Cook Inlet. The POA sits in the industrial waterfront of Anchorage, just south of Cairn Point and north of Ship Creek (Latitude 61°15′ N., Longitude 149°52′ W.; Seward Meridian). Knik Arm and Turnagain Arm are the two branches of upper Cook Inlet, and Anchorage is located where the two Arms join (Figure 2–1 in the Application).

Detailed Description of Activities

Pile Driving Operations

The POA will drive ten 48-inch steel pipe indicator piles as part of the Test Pile Program. Installation of the piles will involve driving each pile with a combination of a vibratory hammer and an impact hammer, or with only an impact pile hammer. It is estimated that vibratory installation of each pile will require approximately 30 minutes. For impact pile driving, pile installation is estimated to require between 80 to 100 minutes per pile, requiring 3,200 to 4,375 pile strikes. Pile driving will be halted during installation of each pile as additional pile sections are added. These shutdown periods will range from a few hours to a day in length to accommodate welding and inspections.

During the Test Pile Program, the contractor is expected to mobilize cranes, tugs, and floating barges, including one derrick barge up to 70 feet wide x 200 feet long. These barges will be moved into location with a tugboat. The barge will not be grounded at any time, but rather anchored in position using a combination of anchor lines and spuds (two to four, depending on the barge). Cranes will be used to conduct overwater work from barges, which are anticipated to remain on-site for the duration of the Test Pile Program.

Indicator pile-load testing involves monitoring installation of prototype piles as they are driven into the ground. Ten 48-inch piles will be driven for this test. The objective of the indicator pile tests is to obtain representative pile installation and capacity data near the area of the future pier-head line. The indicator piles will be vibrated and impact-driven to depths of 175 feet or more from a large derrick barge.

Indicator piles will be driven adjacent to or shoreward of the existing wharf face. The selected locations (Figure 1–3 in the Application) provide representative driving conditions, and enable hydroacoustic measurements in water depths and locations that closely approximate future pile production locations.

Each indicator pile will take approximately 1 to 2 hours to install. However, indicator test pile locations may be as much as 500 feet apart. Therefore, the time required to mobilize equipment to drive each indicator pile will likely limit the number of piles driven to one, or perhaps two, per day.

Indicator piles 1 and 2, which will be placed outside of the U.S. Army Corps of Engineer's dredging prism, will be cut off at or below the mudline immediately after being driven to their final depth. All other piles will remain in place throughout the APMP, with the intention of incorporating them into the new design if possible. If it is determined that the former indicator piles cannot be accommodated as APMP construction nears completion, the piles will be removed by cutting the piles at or below the existing mudline. These measures will ensure that the piles do not interfere with dredging and POA operations. The eight remaining indicator piles will be allowed to settle for two to three weeks and then will be subjected to a maximum of 10 restrikes each, for a total of 80 combined restrikes. No sound attenuation measures will be used during the restrikes, as the actual time spent re-striking piles will be minimal (approximately five minutes per pile).

Geotechnical Characterization and Schedule

The POA proposes to complete geotechnical sampling at five overwater locations (Figure 1–4 in the Application) to support the design and construction of the APMP. Exploration equipment comprised of either a rotary drill rig or Cone Penetrometer Test (CPT) system will be used to perform the geotechnical sampling. This equipment will be located on the barge or wharf during the explorations. Methods used to conduct the sampling are described in Section 1.3.2 of the Application. In-water noise associated with these geotechnical sampling techniques is expected to be below harassment levels and will not be considered under this Authorization.

Hydroacoustic Monitoring

Sound attenuation measures will be used to test for achieved attenuation during pile-driving operations. The POA plans to test attenuation associated with the use of pile cushions, resonance-based systems, and bubble curtains (encapsulated or confined); however, the currents in the project area may preclude bubble curtain use if curtain frames cannot be stabilized during testing. The resonance-based sound attenuation system is a type of system that uses noise-canceling resonating slats around the pile being driven to reduce noise levels from pile driving. The sound attenuation measures will be applied during specific testing periods, and then intentionally removed to allow comparison of sound levels during the driving of an individual pile. In this way, the sound signature of an individual pile can be compared with and without an attenuation device, avoiding the confounding factor of differences among piles. If sound attenuation measures cannot easily be added and removed, then different piles with and without sound attenuation measures will be compared. Data collected from sound attenuation testing will inform future construction of the APMP, which is planned as a multi-project. Details of the hydroacoustic monitoring plan are provided in the Application.

Description of Marine Mammals in the Area of the Specified Activity

Marine mammals most likely to be observed within the upper Cook Inlet Project area include harbor seals (*Phoca vitulina*), beluga whales (*Delphinapterus leucas*), and harbor seals (*Phocoena phocoena;* NMFS 2003). Species that may be encountered infrequently or rarely within the project area are killer whales (*Orcinus orca*) and Steller sea lions (*Eumetopias jubatus;*).

TABLE 2—MARINE MAMMALS IN THE PROJECT AREA

Species or DPS*	Abundance	Comments
Cook Inlet beluga whale (*Delphinapterus leucas*).	312 [a]	Occurs in the project area. Listed as Depleted under the MMPA, Endangered under ESA.
Killer (Orca) whale (*Orcinus orca*) ..	2,347 Resident 587 Transient [b]	Occurs rarely in the project area. No special status or ESA listing.
Harbor porpoise (*Phocoena phocoena*).	31,046 [c]	Occurs occasionally in the project area. No special status or ESA listing.
Harbor seal (*Phoca vitulina*)	27,386 [d]	Occurs in the project area. No special status or ESA listing.
Steller sea lion (*Eumetopias jubatus*).	49,497 [e]	Occurs rarely within the project area. Listed as Depleted under the MMPA, Endangered under ESA.

* DPS refers to distinct population segment under the ESA, and is treated as a species.
[a] Abundance estimate for the Cook Inlet stock.
[b] Abundance estimate for the Eastern North Pacific Alaska Resident stock; the estimate for the transient population is for the Gulf of Alaska, Aleutian Islands, and Bering Sea stock.
[c] Abundance estimate for the Gulf of Alaska stock.
[d] Abundance estimate for the Cook Inlet/Shelikof stock.
[e] Abundance estimate for the Western U.S. Stock.
Sources for populations estimates: Allen and Angliss 2013, 2014, 2015.

We have reviewed POA's detailed species descriptions, including life history information, for accuracy and completeness and refer the reader to Section 4 of POA's application instead of reprinting the information here. Please also refer to NMFS' Web site (*www.nmfs.noaa.gov/pr/species/mammals*) for generalized species accounts.

In the species accounts provided here, we offer a brief introduction to the species and relevant stocks found near POA. Table 2 presents the species and stocks of marine mammals that occur in Cook Inlet along with abundance estimates and likely occurrence in the project area.

Pinnipeds

Harbor Seal

Harbor seals range from Baja California north along the west coasts of Washington, Oregon, California, British Columbia, and Southeast Alaska; west through the Gulf of Alaska, Prince William Sound, and the Aleutian Islands; and north in the Bering Sea to Cape Newenhamand the Pribilof Islands. There are 12 recognized stocks in Alaska. Distribution of the Cook Inlet/Shelikof stock extends from Seal Cape (Coal Bay) through all of upper and lower Cook Inlet. The Cook Inlet/Shelikof stock is estimated at 27,386 individuals (Allen and Angliss 2014).

Harbor seals haul out on rocks, reefs, beaches, and drifting glacial ice (Allen and Angliss 2013). They are non-migratory; their local movements are associated with tides, weather, season, food availability, and reproduction, as well as sex and age class (Allen and Angliss 2013; Boveng *et al.* 2012; Lowry *et al.* 2001; Small *et al.* 2003).

Harbor seals inhabit the coastal and estuarine waters of Cook Inlet and are observed in both upper and lower Cook Inlet throughout most of the year (Boveng *et al.* 2012; Shelden *et al.* 2013). Recent research on satellite-tagged harbor seals observed several movement patterns within Cook Inlet (Boveng *et al.* 2012). In the fall, a portion of the harbor seals appeared to move out of Cook Inlet and into Shelikof Strait, Northern Kodiak Island, and coastal habitats of the Alaska Peninsula. The western coast of Cook Inlet had a higher usage than the eastern coast habitats, and seals generally remained south of the Forelands if captured in lower Cook Inlet (Boveng *et al.* 2012).

The presence of harbor seals in upper Cook Inlet is seasonal. Harbor seals are commonly observed along the Susitna River and other tributaries within upper Cook Inlet during eulachon and salmon migrations (NMFS 2003). The major haul-out sites for harbor seals are located in lower Cook Inlet; however, there are a few in upper Cook Inlet and none in the vicinity of the project site (Montgomery *et al.* 2007).

Harbor seals are occasionally observed in Knik Arm and in the vicinity of the POA, primarily near the mouth of Ship Creek (Cornick *et al.* 2011; Shelden *et al.* 2013). During annual marine mammal surveys conducted by NMFS since 1994, harbor seals have been observed in Knik Arm and in the vicinity of the POA, however, there are no haulouts in the immediate area (Shelden *et al.* 2013).

During construction monitoring conducted at the POA from 2005 through 2011, harbor seals were observed from 2008 through 2011; data were unpublished for years 2005 through 2007 (Table 4–1 in Application) (Cornick *et al.* 2011; Cornick and Saxon-Kendall 2008, 2009, 2010; Markowitz and McGuire 2007; Prevel-Ramos *et al.* 2006). Monitoring took place at different times during different years. The months of March through December were covered during one or more of these survey years. Harbor seals were documented during construction monitoring efforts in 2008. One harbor seal was sighted in Knik Arm on 13 September 2008, traveling north in the vicinity of the POA. In 2009, harbor seals were observed in the months of May through October, with the highest number of sightings being eight in September (Cornick *et al.* 2010; ICRC 2010a). There were no harbor seals reported in 2010 from scientific monitoring efforts; however, 13 were reported from construction monitoring. In 2011, 32 sightings of harbor seals were reported during scientific monitoring, with a total of 57 individual harbor seals sighted. Harbor seals were observed in groups of one to seven individuals (Cornick *et al.* 2011). There were only two sightings of harbor seals during construction monitoring in 2011 (ICRC 2012).

Steller Sea Lion

Two Distinct Population Segments (DPS) of Steller sea lions occur in Alaska: The western and eastern DPS. The western DPS includes animals that occur west of Cape Suckling, Alaska, and therefore includes individuals within the project area. The western DPS was listed under the ESA as threatened in 1990, and continued population decline resulted in a change in listing status to endangered in 1997. Since 2000, studies have documented a continued decline in the population in the central and western Aleutian Islands; however, the population east of Samalga Pass has increased and potentially is stable (Allen and Angliss 2014). This includes the population that inhabits Cook Inlet.

It is rare for Steller sea lions to be encountered in upper Cook Inlet. Steller sea lions have not been documented in upper Cook Inlet during beluga whale aerial surveys conducted annually in June from 1994 through 2012 (Shelden *et al.* 2013). During construction monitoring in June of 2009, a Steller sea lion was documented three times (within the same day) at the POA and was believed to be the same individual each time (ICRC 2009a).

Cetaceans

Harbor Porpoise

In Alaska, harbor porpoises are divided into three stocks: The Bering Sea stock, the Southeast Alaska stock, and, relevant to this proposed IHA, the Gulf of Alaska stock. The Gulf of Alaska stock is currently estimated at 31,046 individuals (Allen and Angliss 2014). NMFS suggests that a finer division of stocks is likely in Alaska (Allen and Angliss 2014). Dahlheim *et al.* (2000) estimated abundance and density of harbor porpoises in Cook Inlet from surveys conducted in the early 1990s. The estimated density of animals in Cook Inlet was 7.2 per 1,000 (km^2), with an abundance estimate of 136 (Dahlheim *et al.,* 2000), indicating that only a small number use Cook Inlet. Hobbs and Waite (2010) estimated a harbor porpoise density in Cook Inlet of 13 per 1,000 km^2 from aerial beluga whale surveys in the late 1990s.

Harbor porpoises occur in both upper and lower Cook Inlet. Small numbers of harbor porpoises have been consistently reported in the upper Cook Inlet between April and October. Several recent studies document monthly counts of harbor porpoises. Across these studies, the largest number of porpoises observed per month ranged from 12 to 129 animals, although the latter count is considered atypical. Highest monthly counts include 17 harbor porpoises reported for spring through fall 2006 by Prevel-Ramos *et al.* (2008), 14 for spring of 2007 by Brueggeman *et al.* (2007), 12 for fall of 2007 by Brueggeman *et al.* (2008a), and 129 for spring through fall in 2007 by Prevel-Ramos *et al.* (2008) between Granite Point and the Susitna River during 2006 and 2007; the reason for the spike in numbers (129) of harbor porpoises in the upper Cook Inlet is unclear and quite disparate with results of past surveys, suggesting it may be an anomaly. In the 2006 survey only three harbor porpoises were sighted during that month. The spike occurred in July, which was followed by sightings of 79 harbor porpoises in August, 78 in September, and 59 in October in 2007. The number of porpoises counted more than once was unknown, suggesting the actual numbers are likely smaller than reported.

Harbor porpoises have been detected during passive acoustic monitoring efforts throughout Cook Inlet, with detection rates being especially prevalent in lower Cook Inlet. In 2009, harbor porpoises were documented by using passive acoustic monitoring in upper Cook Inlet at the Beluga River and Cairn Point (Small 2009, 2010).

Harbor porpoises have been observed within Knik Arm during monitoring efforts since 2005. During POA construction from 2005 through 2011, harbor porpoises were reported in 2009, 2010, and 2011 (Cornick and Saxon-Kendall 2008, 2009, 2010; Cornick *et al.* 2011; Markowitz and McGuire 2007; Prevel-Ramos *et al.* 2006). In 2009, a total of 20 harbor porpoises were observed during construction monitoring with sightings occurring in June, July, August, October, and November. Harbor porpoises were observed twice in 2010, once in July and again in August. In 2011, POA monitoring efforts documented harbor porpoises five times with a total of six individuals in August, October, and November at the POA (Cornick *et al.*

2011). During other monitoring efforts conducted in Knik Arm, there were four sightings of harbor porpoises in Knik Arm in 2005 (Shelden *et al.* 2014) and a single harbor porpoise was observed within the vicinity of the POA in October 2007 (URS 2008).

Killer Whale

The population of the Eastern North Pacific Alaska Resident stock of killer whales contains an estimated 2,347 animals and the Gulf of Alaska, Aleutian Islands, and Bering Sea Transient Stock includes 587 animals (Allen and Angliss, 2014). Numbers of killer whales in Cook Inlet are small compared to the overall population, and most are recorded in lower Cook Inlet.

Resident killer whales are primarily fish-eaters, while transients consume marine mammals. Both are occasionally found in Cook Inlet, where transient killer whales are known to feed on beluga whales, and resident killer whales are known to feed on anadromous fish (Shelden *et al.* 2003).

Killer whales are rare in upper Cook Inlet, and the availability of prey species largely determines the likeliest times for killer whales to be in the area. Killer whales have been sighted in lower Cook Inlet 17 times, with a total of 70 animals between 1993 and 2012 during beluga whale aerial surveys (Shelden *et al.* 2013); no killer whales were observed in upper Cook Inlet. Surveys over 20 years by Shelden *et al.* (2003) documented an increase in sightings and strandings in upper Cook Inlet beginning in the early 1990s. Several of these sightings and strandings report killer whale predation on beluga whales. Passive acoustic monitoring efforts throughout Cook Inlet documented killer whales at Beluga River, Kenai River, and Homer Spit. They were not encountered at any mooring within the Knik Arm. These detections were likely resident (fish-eating) killer whales. Transient killer whales (marine-mammal eating) were not believed to have been detected due to their propensity to move quietly through waters to track prey (Lammers *et al.* 2013; Small 2010).

No killer whales were spotted during surveys in 2004 and 2005 by Funk *et al.* (2005), or Ireland *et al.* (2005). Similarly, none were sighted in 2007 or 2008 by Brueggeman *et al.* (2007, 2008a, 2008b). Killer whales have also not been documented during any POA construction or scientific monitoring (Cornick and Pinney 2011; Cornick and Saxon-Kendall 2008; Cornick *et al.* 2010, 2011; ICRC 2009a, 2010a, 2011a, 2012; Markowitz and McGuire 2007; Prevel-Ramos *et al.* 2006). Very few killer whales, if any, are expected to approach or be in the vicinity of the project area.

Beluga Whale

Beluga whales appear seasonally throughout much of Alaska, except in the Southeast region and the Aleutian Islands. Five stocks are recognized in Alaska: Beaufort Sea stock, eastern Chukchi Sea stock, eastern Bering Sea stock, Bristol Bay stock, and Cook Inlet stock (Allen and Angliss 2014). The Cook Inlet stock is the most isolated of the five stocks, since it is separated from the others by the Alaska Peninsula and resides year round in Cook Inlet (Laidre *et al.* 2000). Only the Cook Inlet stock inhabits the project area.

The Cook Inlet beluga whale Distinct Population Segment (DPS) is genetically (mtDNA) distinct from other Alaska populations suggesting the Peninsula is an effective barrier to genetic exchange (O'Corry-Crowe *et al.* 1997) and that these whales may have been separated from other stocks at least since the last ice age. Laidre *et al.* (2000) examined data from more than 20 marine mammal surveys conducted in the northern Gulf of Alaska and found that sightings of belugas outside Cook Inlet were exceedingly rare, and these were composed of a few stragglers from the Cook Inlet DPS observed at Kodiak Island, Prince William Sound, and Yakutat Bay. Several marine mammal surveys specific to Cook Inlet (Laidre *et al.* 2000, Speckman and Piatt 2000), including those that concentrated on beluga whales (Rugh *et al.* 2000, 2005a), clearly indicate that this stock largely confines itself to Cook Inlet. There is no indication that these whales make forays into the Bering Sea where they might intermix with other Alaskan stocks.

The Cook Inlet beluga DPS was originally estimated at 1,300 whales in 1979 (Calkins 1989) and has been the focus of management concerns since experiencing a dramatic decline in the 1990s. Between 1994 and 1998 the stock declined 47 percent which was attributed to overharvesting by subsistence hunting. Subsistence hunting was estimated to annually remove 10 to 15 percent of the population during this period. Only five belugas have been harvested since 1999, yet the population has continued to decline, with the most recent estimate at only 312 animals (Allen and Angliss 2014). NMFS listed the population as ''depleted'' in 2000 as a consequence of the decline, and as ''endangered'' under the Endangered Species Act (ESA) in 2008 after the population failed to show signs of recovery following a moratorium on subsistence harvest.

In April 2011, NMFS designated critical habitat for the beluga under the ESA (Figure 4–7 in the Application). NMFS designated two areas of critical habitat for beluga whales in Inlet. The designation includes 7,800 km^2 (3,013 mi^2) of marine and estuarine habitat within Cook Inlet, encompassing approximately 1,909 km^2 (738 mi^2) in Area 1 and 5,891 km2 (2,275 mi^2) in Area 2. From spring through fall, Area 1critical habitat has the highest concentration of beluga whales with important foraging and calving habitat. Area 2 critical habitat has a lower concentration of beluga whales in the spring and summer, but is used by belugas in the fall and winter. Critical habitat does not include two areas of military usage, the Eagle River Flats Range on Fort Richardson and military lands of JBER between Mean Higher High Water and Mean High Water. Additionally, the POA, the adjacent navigation channel, and the turning basin were excluded from critical habitat designation due to national security reasons (76 FR 20180).

NMFS' Final Conservation Plan for the Cook Inlet beluga whale characterized the relative value of four habitats as part of the management and recovery strategy (NMFS 2008a). These are sites where beluga whales are most consistently observed, where feeding behavior has been documented, and where dense numbers of whales occur within a relatively confined area of the inlet. Type 1 Habitat is termed ''High Value/High Sensitivity'' and includes what NMFS believes to be the most important and sensitive areas of the Cook Inlet for beluga whales. Type 2 Habitat is termed ''High Value'' and includes summer feeding areas and winter habitats in waters where whales typically occur in lesser densities or in deeper waters. Type 3 Habitat occurs in the offshore areas of the mid and upper inlet and also includes wintering habitat. Type 4 Habitat describes the remaining portions of the range of these whales within Cook Inlet.

The habitat that will be directly impacted from Test Pile activities at the POA is considered Type 1 Habitat, although it lies within the zone that was excluded from any critical habitat designation.

A number of studies have been conducted on the distribution of beluga whales in upper Cook Inlet including NMFS aerial surveys; NMFS data from satellite-tagged belugas (Hobbs *et al.* 2005); opportunistic sightings; baseline studies of beluga whale occurrence in Knik Arm conducted for the Knik Arm Bridge and Toll Authority (KABATA) (Funk *et al.* 2005); baseline studies of

beluga whale occurrence in Turnagain Arm conducted in preparation for Seward Highway improvements (Markowitz *et al.* 2007); marine mammal surveys conducted at Ladd Landing to assess a coal shipping project (Prevel-Ramos *et al.* 2008); marine mammal surveys off Granite Point, the Beluga River, and farther south in the inlet at North Ninilchik (Brueggeman *et al.* 2007, 2008a, 2008b); passive acoustic monitoring surveys throughout Cook Inlet (Lammers *et al.* 2013); JBER observations conducted within Eagle Bay and Eagle River (U.S. Army Garrison Fort Richardson 2009); and the scientific and construction monitoring program at the POA (Cornick and Pinney 2011, Cornick and Saxon-Kendall 2007, 2008; Cornick *et al.* 2010, Cornick *et al.* 2011; ICRC 2009a, 2010a, 2011a, 2012; Markowitz and McGuire 2007; Prevel-Ramos *et al.* 2006). These data have provided a relatively good picture of the distribution and occurrence of beluga whales in upper Cook Inlet, particularly in lower Knik Arm and the project area. Findings of these studies are presented in detail in Section 4.5 in the Application.

The POA conducted a NMFS-approved monitoring program for beluga whales and other marine mammals focused on the POA area from 2005 to 2011 as part of their permitting requirements for the Marine Terminal Redevelopment Project (MTRP) (Table 4–6 in Application). Scientific monitoring was initiated in 2005 and was conducted by LGL Limited (LGL) in 2005 and 2006 (Markowitz and McGuire 2007; Prevel-Ramos *et al.* 2006). Alaska Pacific University (APU) resumed scientific monitoring in 2007 (Cornick and Saxon-Kendall 2008) and continued monitoring each year through 2011. Additionally, construction monitoring occurred during in-water construction work.

Data on beluga whale sighting rates, grouping, behavior, and movement indicate that the POA is a relatively low-use area, occasionally visited by lone whales or small groups of whales. They are observed most often at low tide in the fall, peaking in late August to early September. Although groups with calves have been observed to enter the POA area, data do not suggest that the area is an important nursery area.

Although the POA scientific monitoring studies indicate that the area is not used frequently by many beluga whales, it is apparently used for foraging habitat by whales traveling between lower and upper Knik Arm, as individuals and groups of beluga whales have been observed passing through the area each year during monitoring efforts (Table 4–7 in Application). In all years, diving and traveling were the most common behaviors observed, with many instances of confirmed feeding. Sighting rates at the POA ranged from 0.05 to 0.4 whales per hour (Cornick and Saxon-Kendall 2008; Cornick *et al.* 2011; Markowitz and McGuire 2007; Prevel-Ramos *et al.* 2006), as compared to three to five whales per hour at Eklutna, 20 to 30 whales per hour at Birchwood, and three to eight whales per hour at Cairn Point (Funk *et al.* 2005), indicating that these areas are of higher use than the POA.

Data collected annually during monitoring efforts demonstrated that few beluga whales were observed in July and early August; numbers of sightings increased in mid- August, with the highest numbers observed late August to mid-September. In all years, beluga whales have been observed to enter the project footprint while construction activities were taking place, including pile driving and dredging. The most commonly observed behaviors were traveling, diving, and suspected feeding. No apparent behavioral changes or reactions to in-water construction activities were observed by either the construction or scientific observers (Cornick *et al.* 2011).

Potential Effects of the Specified Activity on Marine Mammals and Their Habitat

This section includes a summary and discussion of the ways that stressors, (*e.g.* pile driving,) and potential mitigation activities, associated with the proposed POA Test Pile Program may impact marine mammals and their habitat. The ''Estimated Take by Incidental Harassment'' section later in this document will include a quantitative analysis of the number of individuals that are expected to be taken by this activity. The ''Negligible Impact Analysis'' section will include the analysis of how this specific activity will impact marine mammals and will consider the content of this section, the ''Estimated Take by Incidental Harassment'' section, and the ''Proposed Mitigation'' section to draw conclusions regarding the likely impacts of this activity on the reproductive success or survivorship of individuals and from that on the affected marine mammal populations or stocks. In the following discussion, we provide general background information on sound and marine mammal hearing before considering potential effects to marine mammals from sound produced by pile driving.

Description of Sound Sources

Sound travels in waves, the basic components of which are frequency, wavelength, velocity, and amplitude. Frequency is the number of pressure waves that pass by a reference point per unit of time and is measured in hertz (Hz) or cycles per second. Wavelength is the distance between two peaks of a sound wave; lower frequency sounds have longer wavelengths than higher frequency sounds and attenuate (decrease) more rapidly in shallower water. Amplitude is the height of the sound pressure wave or the 'loudness' of a sound and is typically measured using the decibel (dB) scale. A dB is the ratio between a measured pressure (with sound) and a reference pressure (sound at a constant pressure, established by scientific standards). It is a logarithmic unit that accounts for large variations in amplitude; therefore, relatively small changes in dB ratings correspond to large changes in sound pressure. When referring to sound pressure levels (SPLs; the sound force per unit area), sound is referenced in the context of underwater sound pressure to 1 microPascal (μPa). One pascal is the pressure resulting from a force of one newton exerted over an area of one square meter. The source level (SL) represents the sound level at a distance of 1 m from the source (referenced to 1 μPa). The received level is the sound level at the listener's position. Note that all underwater sound levels in this document are referenced to a pressure of 1 μPa and all airborne sound levels in this document are referenced to a pressure of 20 μPa.

Root mean square (rms) is the quadratic mean sound pressure over the duration of an impulse. Rms is calculated by squaring all of the sound amplitudes, averaging the squares, and then taking the square root of the average (Urick, 1983). Rms accounts for both positive and negative values; squaring the pressures makes all values positive so that they may be accounted for in the summation of pressure levels (Hastings and Popper, 2005). This measurement is often used in the context of discussing behavioral effects, in part because behavioral effects, which often result from auditory cues, may be better expressed through averaged units than by peak pressures.

When underwater objects vibrate or activity occurs, sound-pressure waves are created. These waves alternately compress and decompress the water as the sound wave travels. Underwater sound waves radiate in all directions away from the source (similar to ripples on the surface of a pond), except in cases where the source is directional.

The compressions and decompressions associated with sound waves are detected as changes in pressure by aquatic life and man-made sound receptors such as hydrophones.

Even in the absence of sound from the specified activity, the underwater environment is typically loud due to ambient sound. Ambient sound is defined as environmental background sound levels lacking a single source or point (Richardson *et al.,* 1995), and the sound level of a region is defined by the total acoustical energy being generated by known and unknown sources. These sources may include physical (*e.g.,* waves, earthquakes, ice, atmospheric sound), biological (*e.g.,* sounds produced by marine mammals, fish, and invertebrates), and anthropogenic sound (*e.g.,* vessels, dredging, aircraft, construction). A number of sources contribute to ambient sound, including the following (Richardson *et al.,* 1995):

- Wind and waves: The complex interactions between wind and water surface, including processes such as breaking waves and wave-induced bubble oscillations and cavitation, are a main source of naturally occurring ambient noise for frequencies between 200 Hz and 50 kHz (Mitson, 1995). In general, ambient sound levels tend to increase with increasing wind speed and wave height. Surf noise becomes important near shore, with measurements collected at a distance of 8.5 km from shore showing an increase of 10 dB in the 100 to 700 Hz band during heavy surf conditions.
- Precipitation: Sound from rain and hail impacting the water surface can become an important component of total noise at frequencies above 500 Hz, and possibly down to 100 Hz during quiet times.
- Biological: Marine mammals can contribute significantly to ambient noise levels, as can some fish and shrimp. The frequency band for biological contributions is from approximately 12 Hz to over 100 kHz.
- Anthropogenic: Sources of ambient noise related to human activity include transportation (surface vessels and aircraft), dredging and construction, oil and gas drilling and production, seismic surveys, sonar, explosions, and ocean acoustic studies. Shipping noise typically dominates the total ambient noise for frequencies between 20 and 300 Hz. In general, the frequencies of anthropogenic sounds are below 1 kHz and, if higher frequency sound levels are created, they attenuate rapidly (Richardson *et al.,* 1995). Sound from identifiable anthropogenic sources other than the activity of interest (*e.g.,* a passing vessel) is sometimes termed background sound, as opposed to ambient sound.

The sum of the various natural and anthropogenic sound sources at any given location and time—which comprise ''ambient'' or ''background'' sound—depends not only on the source levels (as determined by current weather conditions and levels of biological and shipping activity) but also on the ability of sound to propagate through the environment. In turn, sound propagation is dependent on the spatially and temporally varying properties of the water column and sea floor, and is frequency-dependent. As a result of the dependence on a large number of varying factors, ambient sound levels can be expected to vary widely over both coarse and fine spatial and temporal scales. Sound levels at a given frequency and location can vary by 10–20 dB from day to day (Richardson *et al.,* 1995). The result is that, depending on the source type and its intensity, sound from the specified activity may be a negligible addition to the local environment or could form a distinctive signal that may affect marine mammals.

TABLE 3—REPRESENTATIVE SOUND LEVELS OF ANTHROPOGENIC SOURCES

Sound source	Frequency range (Hz)	Underwater sound level	Reference
Small vessels	250–1,000	151 dB rms at 1 m	Richardson *et al.,* 1995.
Tug docking gravel barge	200–1,000	149 dB rms at 100 m	Blackwell and Greene, 2002.
Vibratory driving of 72-in steel pipe pile	10–1,500	180 dB rms at 10 m	Reyff, 2007.
Impact driving of 36-in steel pipe pile	10–1,500	195 dB rms at 10 m	Laughlin, 2007.
Impact driving of 66-in cast-in-steel-shell (CISS) pile.	10–1,500	195 dB rms at 10 m	Reviewed in Hastings and Popper, 2005.

There are two general categories of sound types: Impulse and non-pulse. Vibratory pile driving is considered to be continuous or non-pulsed while impact pile driving is considered to be an impulse or pulsed sound type. The distinction between these two sound types is important because they have differing potential to cause physical effects, particularly with regard to hearing (*e.g.,* Ward, 1997 in Southall *et al.,* 2007). Please see Southall *et al.,* (2007) for an in-depth discussion of these concepts.

Pulsed sound sources (*e.g.,* explosions, gunshots, sonic booms, impact pile driving) produce signals that are brief (typically considered to be less than one second), broadband, atonal transients (ANSI, 1986; Harris, 1998; NIOSH, 1998; ISO, 2003; ANSI, 2005) and occur either as isolated events or repeated in some succession. Pulsed sounds are all characterized by a relatively rapid rise from ambient pressure to a maximal pressure value followed by a rapid decay period that may include a period of diminishing, oscillating maximal and minimal pressures, and generally have an increased capacity to induce physical injury as compared with sounds that lack these features.

Non-pulsed sounds can be tonal, narrowband, or broadband, brief or prolonged, and may be either continuous or non-continuous (ANSI, 1995; NIOSH, 1998). Some of these non-pulsed sounds can be transient signals of short duration but without the essential properties of pulses (*e.g.,* rapid rise time). Examples of non-pulsed sounds include those produced by vessels, aircraft, machinery operations such as drilling or dredging, vibratory pile driving, and active sonar systems (such as those used by the U.S. Navy). The duration of such sounds, as received at a distance, can be greatly extended in a highly reverberant environment.

The likely or possible impacts of the proposed Test Pile Program on marine mammals could involve both non-acoustic and acoustic stressors. Potential non-acoustic stressors could result from the physical presence of the equipment and personnel. Any impacts to marine mammals, however, are expected to primarily be acoustic in nature.

Marine Mammal Hearing

Hearing is the most important sensory modality for marine mammals, and exposure to sound can have deleterious

effects. To appropriately assess these potential effects, it is necessary to understand the frequency ranges marine mammals are able to hear. Current data indicate that not all marine mammal species have equal hearing capabilities (*e.g.,* Richardson *et al.,* 1995; Wartzok and Ketten, 1999; Au and Hastings, 2008). To reflect this, Southall *et al.* (2007) recommended that marine mammals be divided into functional hearing groups based on measured or estimated hearing ranges on the basis of available behavioral data, audiograms derived using auditory evoked potential techniques, anatomical modeling, and other data. The lower and/or upper frequencies for some of these functional hearing groups have been modified from those designated by Southall *et al.* (2007). The functional groups and the associated frequencies are indicated below (note that these frequency ranges do not necessarily correspond to the range of best hearing, which varies by species):

- Low-frequency cetaceans (mysticetes): Functional hearing is estimated to occur between approximately 7 Hz and 25 kHz (extended from 22 kHz; Watkins, 1986; Au *et al.,* 2006; Lucifredi and Stein, 2007; Ketten and Mountain, 2009; Tubelli *et al.,* 2012);
- Mid-frequency cetaceans (larger toothed whales, beaked whales, and most delphinids): Functional hearing is estimated to occur between approximately 150 Hz and 160 kHz;
- High-frequency cetaceans (porpoises, river dolphins, and members of the genera *Kogia* and *Cephalorhynchus;* now considered to include two members of the genus *Lagenorhynchus* on the basis of recent echolocation data and genetic data [May-Collado and Agnarsson, 2006; Kyhn *et al.* 2009, 2010; Tougaard *et al.* 2010]): Functional hearing is estimated to occur between approximately 200 Hz and 180 kHz; and
- Pinnipeds in water: Functional hearing is estimated to occur between approximately 75 Hz to 100 kHz for Phocidae (true seals) and between 100 Hz and 48 kHz for Otariidae (eared seals), with the greatest sensitivity between approximately 700 Hz and 20 kHz. The pinniped functional hearing group was modified from Southall *et al.* (2007) on the basis of data indicating that phocid species have consistently demonstrated an extended frequency range of hearing compared to otariids, especially in the higher frequency range (Hemilä *et al.,* 2006; Kastelein *et al.,* 2009; Reichmuth *et al.,* 2013).

Of the three cetacean species likely to occur in the proposed project area and for which take is requested, two are classified as mid-frequency cetaceans (*i.e.,* killer whale, beluga whale), and one is classified as a high-frequency cetacean (*i.e.,* harbor porpoise) (Southall *et al.,* 2007). Additionally, harbor seals are classified as members of the phocid pinnipeds in-water functional hearing group while Steller sea lions are grouped under the Otariid pinnipeds in-water functional hearing group.

Acoustic Impacts

Potential Effects of Pile Driving Sound—The effects of sounds from pile driving might result in one or more of the following: Temporary or permanent hearing impairment, non-auditory physical or physiological effects, behavioral disturbance, and masking (Richardson *et al.,* 1995; Gordon *et al.,* 2004; Nowacek *et al.,* 2007; Southall *et al.,* 2007). The effects of pile driving on marine mammals are dependent on several factors, including the size, type, and depth of the animal; the depth, intensity, and duration of the pile driving sound; the depth of the water column; the substrate of the habitat; the standoff distance between the pile and the animal; and the sound propagation properties of the environment. Impacts to marine mammals from pile driving activities are expected to result primarily from acoustic pathways. As such, the degree of effect is intrinsically related to the received level and duration of the sound exposure, which are in turn influenced by the distance between the animal and the source. The further away from the source, the less intense the exposure should be. The substrate and depth of the habitat affect the sound propagation properties of the environment. Shallow environments are typically more structurally complex, which leads to rapid sound attenuation. In addition, substrates that are soft (*e.g.,* sand) would absorb or attenuate the sound more readily than hard substrates (*e.g.,* rock) which may reflect the acoustic wave. Soft porous substrates would also likely require less time to drive the pile, and possibly less forceful equipment, which would ultimately decrease the intensity of the acoustic source.

In the absence of mitigation, impacts to marine species would be expected to result from physiological and behavioral responses to both the type and strength of the acoustic signature (Viada *et al.,* 2008). The type and severity of behavioral impacts are more difficult to document due to limited studies addressing the behavioral effects of impulse sounds on marine mammals. Potential effects from impulse sound sources can range in severity from effects such as behavioral disturbance or tactile perception to physical discomfort, slight injury of the internal organs and the auditory system, or mortality (Yelverton *et al.,* 1973).

Hearing Impairment and Other Physical Effects—Marine mammals exposed to high intensity sound repeatedly or for prolonged periods can experience hearing threshold shift (TS), which is the loss of hearing sensitivity at certain frequency ranges (Kastak *et al.,* 1999; Schlundt *et al.,* 2000; Finneran *et al.,* 2002, 2005). TS can be permanent (PTS), in which case the loss of hearing sensitivity is not recoverable, or temporary (TTS), in which case the animal's hearing threshold would recover over time (Southall *et al.,* 2007). Marine mammals depend on acoustic cues for vital biological functions, (*e.g.,* orientation, communication, finding prey, avoiding predators); thus, TTS may result in reduced fitness in survival and reproduction. However, this depends on the frequency and duration of TTS, as well as the biological context in which it occurs. TTS of limited duration, occurring in a frequency range that does not coincide with that used for recognition of important acoustic cues, would have little to no effect on an animal's fitness. Repeated sound exposure that leads to TTS could cause PTS. PTS constitutes injury, but TTS does not (Southall *et al.,* 2007). The following subsections discuss in somewhat more detail the possibilities of TTS, PTS, and non-auditory physical effects.

Temporary Threshold Shift—TTS is the mildest form of hearing impairment that can occur during exposure to a strong sound (Kryter, 1985). While experiencing TTS, the hearing threshold rises, and a sound must be stronger in order to be heard. In terrestrial mammals, TTS can last from minutes or hours to days (in cases of strong TTS). For sound exposures at or somewhat above the TTS threshold, hearing sensitivity in both terrestrial and marine mammals recovers rapidly after exposure to the sound ends. Few data on sound levels and durations necessary to elicit mild TTS have been obtained for marine mammals, and none of the published data concern TTS elicited by exposure to multiple pulses of sound. Available data on TTS in marine mammals are summarized in Southall *et al.* (2007).

Given the available data, the received level of a single pulse (with no frequency weighting) might need to be approximately 186 dB re 1 μPa^2-s (*i.e.,* 186 dB sound exposure level [SEL] or approximately 221–226 dB p-p [peak]) in order to produce brief, mild TTS.

Exposure to several strong pulses that each have received levels near 190 dB rms (175–180 dB SEL) might result in cumulative exposure of approximately 186 dB SEL and thus slight TTS in a small odontocete, assuming the TTS threshold is (to a first approximation) a function of the total received pulse energy.

The above TTS information for odontocetes is derived from studies on the bottlenose dolphin (*Tursiops truncatus*) and beluga whale. There is no published TTS information for other species of cetaceans. However, preliminary evidence from a harbor porpoise exposed to pulsed sound suggests that its TTS threshold may have been lower (Lucke *et al.,* 2009). As summarized above, data that are now available imply that TTS is unlikely to occur unless odontocetes are exposed to pile driving pulses stronger than 180 dB re 1 µPa rms.

Permanent Threshold Shift—When PTS occurs, there is physical damage to the sound receptors in the ear. In severe cases, there can be total or partial deafness, while in other cases the animal has an impaired ability to hear sounds in specific frequency ranges (Kryter, 1985). There is no specific evidence that exposure to pulses of sound can cause PTS in any marine mammal. However, given the possibility that mammals close to a sound source can incur TTS, it is possible that some individuals might incur PTS. Single or occasional occurrences of mild TTS are not indicative of permanent auditory damage, but repeated or (in some cases) single exposures to a level well above that causing TTS onset might elicit PTS.

Relationships between TTS and PTS thresholds have not been studied in marine mammals but are assumed to be similar to those in humans and other terrestrial mammals, based on anatomical similarities. PTS might occur at a received sound level at least several decibels above that inducing mild TTS if the animal were exposed to strong sound pulses with rapid rise time. Based on data from terrestrial mammals, a precautionary assumption is that the PTS threshold for impulse sounds (such as pile driving pulses as received close to the source) is at least 6 dB higher than the TTS threshold on a peak-pressure basis and probably greater than 6 dB (Southall *et al.,* 2007). On an SEL basis, Southall *et al.* (2007) estimated that received levels would need to exceed the TTS threshold by at least 15 dB for there to be risk of PTS. Thus, for cetaceans, Southall *et al.* (2007) estimate that the PTS threshold might be an M-weighted SEL (for the sequence of received pulses) of approximately 198 dB re 1 μPa^2-s (15 dB higher than the TTS threshold for an impulse). Given the higher level of sound necessary to cause PTS as compared with TTS, it is considerably less likely that PTS could occur.

Although no marine mammals have been shown to experience TTS or PTS as a result of being exposed to pile driving activities, captive bottlenose dolphins and beluga whales exhibited changes in behavior when exposed to strong pulsed sounds (Finneran *et al.,* 2000, 2002, 2005). The animals tolerated high received levels of sound before exhibiting aversive behaviors. Experiments on a beluga whale showed that exposure to a single watergun impulse at a received level of 207 kPa (30 psi) p-p, which is equivalent to 228 dB p-p, resulted in a 7 and 6 dB TTS in the beluga whale at 0.4 and 30 kHz, respectively. Thresholds returned to within 2 dB of the pre-exposure level within four minutes of the exposure (Finneran *et al.,* 2002). Although the source level of pile driving from one hammer strike is expected to be much lower than the single watergun impulse cited here, animals being exposed for a prolonged period to repeated hammer strikes could receive more sound exposure in terms of SEL than from the single watergun impulse (estimated at 188 dB re 1 μPa^2-s) in the aforementioned experiment (Finneran *et al.,* 2002). However, in order for marine mammals to experience TTS or PTS, the animals have to be close enough to be exposed to high intensity sound levels for a prolonged period of time. Based on the best scientific information available, these SPLs are far below the thresholds that could cause TTS or the onset of PTS.

Non-auditory Physiological Effects—Non-auditory physiological effects or injuries that theoretically might occur in marine mammals exposed to strong underwater sound include stress, neurological effects, bubble formation, resonance effects, and other types of organ or tissue damage (Cox *et al.,* 2006; Southall *et al.,* 2007). Studies examining such effects are limited. In general, little is known about the potential for pile driving to cause auditory impairment or other physical effects in marine mammals. Available data suggest that such effects, if they occur at all, would presumably be limited to short distances from the sound source and to activities that extend over a prolonged period. The available data do not allow identification of a specific exposure level above which non-auditory effects can be expected (Southall *et al.,* 2007) or any meaningful quantitative predictions of the numbers (if any) of marine mammals that might be affected in those ways. Marine mammals that show behavioral avoidance of pile driving, including some odontocetes and some pinnipeds, are especially unlikely to incur auditory impairment or non-auditory physical effects.

Disturbance Reactions

Disturbance includes a variety of effects, including subtle changes in behavior, more conspicuous changes in activities, and displacement. Behavioral responses to sound are highly variable and context-specific and reactions, if any, depend on species, state of maturity, experience, current activity, reproductive state, auditory sensitivity, time of day, and many other factors (Richardson *et al.,* 1995; Wartzok *et al.,* 2003; Southall *et al.,* 2007).

Habituation can occur when an animal's response to a stimulus wanes with repeated exposure, usually in the absence of unpleasant associated events (Wartzok *et al.,* 2003). Animals are most likely to habituate to sounds that are predictable and unvarying. The opposite process is sensitization, when an unpleasant experience leads to subsequent responses, often in the form of avoidance, at a lower level of exposure. Behavioral state may affect the type of response as well. For example, animals that are resting may show greater behavioral change in response to disturbing sound levels than animals that are highly motivated to remain in an area for feeding (Richardson *et al.,* 1995; NRC, 2003; Wartzok *et al.,* 2003).

Controlled experiments with captive marine mammals showed pronounced behavioral reactions, including avoidance of loud sound sources (Ridgway *et al.,* 1997; Finneran *et al.,* 2003). Observed responses of wild marine mammals to loud pulsed sound sources (typically seismic guns or acoustic harassment devices, but also including pile driving) have been varied but often consist of avoidance behavior or other behavioral changes suggesting discomfort (Morton and Symonds, 2002; Thorson and Reyff, 2006; see also Gordon *et al.,* 2004; Wartzok *et al.,* 2003; Nowacek *et al.,* 2007). Responses to continuous sound, such as vibratory pile installation, have not been documented as well as responses to pulsed sounds.

With both types of pile driving, it is likely that the onset of pile driving could result in temporary, short term changes in an animal's typical behavior and/or avoidance of the affected area. These behavioral changes may include (Richardson *et al.,* 1995): changing durations of surfacing and dives,

number of blows per surfacing, or moving direction and/or speed; reduced/increased vocal activities; changing/cessation of certain behavioral activities (such as socializing or feeding); visible startle response or aggressive behavior (such as tail/fluke slapping or jaw clapping); avoidance of areas where sound sources are located; and/or flight responses (*e.g.,* pinnipeds flushing into water from haul-outs or rookeries). Pinnipeds may increase their haul-out time, possibly to avoid in-water disturbance (Thorson and Reyff, 2006).

The biological significance of many of these behavioral disturbances is difficult to predict, especially if the detected disturbances appear minor. However, the consequences of behavioral modification could be expected to be biologically significant if the change affects growth, survival, or reproduction. Significant behavioral modifications that could potentially lead to effects on growth, survival, or reproduction include:

- Drastic changes in diving/surfacing patterns (such as those thought to cause beaked whale stranding due to exposure to military mid-frequency tactical sonar);
- Habitat abandonment due to loss of desirable acoustic environment; and
- Cessation of feeding or social interaction.

The onset of behavioral disturbance from anthropogenic sound depends on both external factors (characteristics of sound sources and their paths) and the specific characteristics of the receiving animals (hearing, motivation, experience, demography) and is difficult to predict (Southall *et al.,* 2007).

Auditory Masking—Natural and artificial sounds can disrupt behavior by masking, or interfering with, a marine mammal's ability to hear other sounds. Masking occurs when the receipt of a sound is interfered with by another coincident sound at similar frequencies and at similar or higher levels. Chronic exposure to excessive, though not high-intensity, sound could cause masking at particular frequencies for marine mammals that utilize sound for vital biological functions. Masking can interfere with detection of acoustic signals such as communication calls, echolocation sounds, and environmental sounds important to marine mammals. Therefore, under certain circumstances, marine mammals whose acoustical sensors or environment are being severely masked could also be impaired from maximizing their performance fitness in survival and reproduction. If the coincident (masking) sound were anthropogenic, it could be potentially harassing if it disrupted hearing-related behavior. It is important to distinguish TTS and PTS, which persist after the sound exposure, from masking, which occurs only during the sound exposure. Because masking (without resulting in TS) is not associated with abnormal physiological function, it is not considered a physiological effect, but rather a potential behavioral effect.

Masking occurs at the frequency band which the animals utilize so the frequency range of the potentially masking sound is important in determining any potential behavioral impacts. Because sound generated from in-water vibratory pile driving is mostly concentrated at low frequency ranges, it may have less effect on high frequency echolocation sounds made by porpoises. However, lower frequency man-made sounds are more likely to affect detection of communication calls and other potentially important natural sounds such as surf and prey sound. It may also affect communication signals when they occur near the sound band and thus reduce the communication space of animals (*e.g.,* Clark *et al.,* 2009) and cause increased stress levels (*e.g.,* Foote *et al.,* 2004; Holt *et al.,* 2009).

Masking affects both senders and receivers of the signals and can potentially have long-term chronic effects on marine mammal species and populations. Recent research suggests that low frequency ambient sound levels have increased by as much as 20 dB (more than three times in terms of SPL) in the world's ocean from pre-industrial periods, and that most of these increases are from distant shipping (Hildebrand, 2009). All anthropogenic sound sources, such as those from vessel traffic, pile driving, and dredging activities, contribute to the elevated ambient sound levels, thus intensifying masking.

Vibratory pile driving is relatively short-term, with rapid oscillations occurring for 10 to 30 minutes per installed pile. It is possible that vibratory pile driving resulting from this proposed action may mask acoustic signals important to the behavior and survival of marine mammal species, but the short-term duration and limited affected area would result in insignificant impacts from masking.

Impacts of geotechnical Investigations—Limited data exist regarding underwater noise levels associated with Standard Penetration Test (SPT) or Cone Penetrometer Test (CPT) investigations, and no data exist for SPT or CPT geotechnical investigations in Cook Inlet or Knik Arm. Geotechnical drilling for the POA, which includes SPT or CPT sampling, will be of smaller size and scale than the full-scale drilling operations described below. Hydroacoustic tests conducted by Illingworth & Rodkin (2014a) in May 2013 revealed that underwater noise levels from large drilling operations were below ambient noise levels. On two different occasions, Sound Source Verification (SSV) measurements were made of conductor pipe drilling, with and without other noise-generating activities occurring simultaneously. Drilling sounds could not be measured or heard above the other sounds emanating from the rig. The highest sound levels measured that were emanating from the rig during drilling were 128 dB rms, and they were attributed to a different sound source (Illingworth & Rodkin 2014a). Therefore, NMFS will assume that sound impacts from geotechnical investigations will not rise to Level B harassment thresholds.

Acoustic Effects, Airborne—Marine mammals that occur in the project area could be exposed to airborne sounds associated with pile driving that have the potential to cause harassment, depending on their distance from pile driving activities. Airborne pile driving sound would not impact cetaceans because sound from atmospheric sources does not transmit well underwater (Richardson *et al.,* 1995); thus, airborne sound may only be an issue for pinnipeds either hauled-out or looking with heads above water in the project area. Most likely, airborne sound would cause behavioral responses similar to those discussed above in relation to underwater sound. For instance, anthropogenic sound could cause hauled-out pinnipeds to exhibit changes in their normal behavior, such as reduction in vocalizations, or cause them to temporarily abandon their habitat and move further from the source. Studies by Blackwell *et al.* (2004) and Moulton *et al.* (2005) indicate a tolerance or lack of response to unweighted airborne sounds as high as 112 dB peak and 96 dB rms.

Vessel Interaction

Besides being susceptible to vessel strikes, cetacean and pinniped responses to vessels may result in behavioral changes, including greater variability in the dive, surfacing, and respiration patterns; changes in vocalizations; and changes in swimming speed or direction (NRC 2003). There will be a temporary and localized increase in vessel traffic during construction. A maximum of three work barges will be present at any time during the in-water and over water work. The barges will be located near

each other where construction is occurring. Additionally, the floating pier will be tugged into position prior to installation.

Potential Effects on Marine Mammal Habitat

The primary potential impacts to marine mammal habitat are associated with elevated sound levels produced by impact and vibratory pile driving in the area. However, other potential impacts to the surrounding habitat from physical disturbance are also possible.

Potential Pile Driving Effects on Prey—Test Pile activities would produce continuous (*i.e.,* vibratory pile driving) sounds and pulsed (*i.e.* impact driving) sounds. Fish react to sounds that are especially strong and/or intermittent low-frequency sounds. Short duration, sharp sounds can cause overt or subtle changes in fish behavior and local distribution. Hastings and Popper (2005) identified several studies that suggest fish may relocate to avoid certain areas of sound energy. Additional studies have documented effects of pile driving on fish, although several are based on studies in support of large, multiyear bridge construction projects (*e.g.,* Scholik and Yan, 2001, 2002; Popper and Hastings, 2009). Sound pulses at received levels of 160 dB may cause subtle changes in fish behavior. SPLs of 180 dB may cause noticeable changes in behavior (Pearson *et al.,* 1992; Skalski *et al.,* 1992). SPLs of sufficient strength have been known to cause injury to fish and fish mortality.

The area likely impacted by the proposed Test Pile Program is relatively small compared to the available habitat in Knik Arm. Due to the lack of definitive studies on how the proposed Test Pile Program might affect prey availability for marine mammals there is uncertainty to the impact analysis. However, this uncertainty will be mitigated due to the low quality and quantity of marine habitat, low abundance and seasonality of salmonids and other prey, and mitigation measures already in place to reduce impacts to fish. The most likely impact to fish from the proposed Test Pile Program will be temporary behavioral avoidance of the immediate area. In general, the nearer the animal is to the source the higher the likelihood of high energy and a resultant effect (such as mild, moderate, mortal injury). Affected fish would represent only a small portion of food available to marine mammals in the area. The duration of fish avoidance of this area after pile driving stops is unknown, but a rapid return to normal recruitment, distribution, and behavior is anticipated. Any behavioral avoidance by fish of the disturbed area will still leave significantly large areas of fish and marine mammal foraging habitat in Knik Arm. Therefore, the impacts on marine mammal prey during the proposed Test Pile Program are expected to be minor.

Effects to Foraging Habitat

The Cook Inlet beluga whale is the only marine mammal species in the project area that has critical habitat designated in Cook Inlet. NMFS designated critical habitat in portions of Cook Inlet, including Knik Arm. NMFS noted that Knik Arm is Type 1 habitat for the Cook Inlet beluga whale, which means it is the most valuable, used intensively by beluga whales from spring through fall for foraging and nursery habitat. However, the area in the immediate vicinity of POA has been excluded from critical habitat designation. The waters around POA are subject to heavy vessel traffic and the shoreline is built up and industrialized, resulting in habitat of marginal quality.

The proposed Test Pile Program will not result in permanent impacts to habitats used by marine mammals. Pile installation may temporarily increase turbidity resulting from suspended sediments. Any increases would be temporary, localized, and minimal. POA must comply with state water quality standards during these operations by limiting the extent of turbidity to the immediate project area. In general, turbidity associated with pile installation is localized to about a 25-foot radius around the pile (Everitt *et al.* 1980). Cetaceans are not expected to be close enough to the project site driving areas to experience effects of turbidity, and any pinnipeds will be transiting the terminal area and could avoid localized areas of turbidity. Therefore, the impact from increased turbidity levels is expected to be discountable to marine mammals. The proposed Test Pile Program will result in temporary changes in the acoustic environment. Marine mammals may experience a temporary loss of habitat because of temporarily elevated noise levels. The most likely impact to marine mammal habitat would be from pile-driving effects on marine mammal prey at and near the POA and minor impacts to the immediate substrate during installation of piles during the proposed Test Pile Program. Long-term effects of any prey displacements are not expected to affect the overall fitness of the Cook Inlet beluga whale population or its recovery; effects will be minor and will terminate after cessation of the proposed Test Pile Program.

Proposed Mitigation Measures

In order to issue an IHA under section 101(a)(5)(D) of the MMPA, NMFS must set forth the permissible methods of taking pursuant to such activity, ''and other means of effecting the least practicable impact on such species or stock and its habitat, paying particular attention to rookeries, mating grounds, and areas of similar significance, and on the availability of such species or stock for taking'' for certain subsistence uses. NMFS regulations require applicants for incidental take authorizations to include information about the availability and feasibility (economic and technological) of equipment, methods, and manner of conducting such activity or other means of effecting the least practicable adverse impact upon the affected species or stocks, their habitat. 50 CFR 216.104(a)(11). For the proposed project, POA worked with NMFS and proposed the following mitigation measures to minimize the potential impacts to marine mammals in the project vicinity. The primary purposes of these mitigation measures are to minimize sound levels from the activities, and to monitor marine mammals within designated zones of influence corresponding to NMFS' current Level A and B harassment thresholds which are depicted in Table 5 found later in the *Estimated Take by Incidental Harassment* section.

In addition to the measures described later in this section, POA would employ the following standard mitigation measures:

(a) Conduct briefings between construction supervisors and crews, marine mammal monitoring team, and POA staff prior to the start of all pile driving activity, and when new personnel join the work, in order to explain responsibilities, communication procedures, marine mammal monitoring protocol, and operational procedures.

(b) For in-water heavy machinery work other than pile driving (using, *e.g.,* standard barges, tug boats, barge-mounted excavators, or clamshell equipment used to place or remove material), if a marine mammal comes within 10 m, operations shall cease and vessels shall reduce speed to the minimum level required to maintain steerage and safe working conditions. This type of work could include the following activities: (1) Movement of the barge to the pile location or (2) positioning of the pile on the substrate via a crane (*i.e.,* stabbing the pile).

Time Restrictions—Work would occur only during daylight hours, when visual monitoring of marine mammals can be conducted.

Establishment of Disturbance Zone or Zone of Influence—Disturbance zones or zones of influence (ZOI) are the areas in which SPLs equal or exceed 160 dB rms for impact driving and 125 dB rms for vibratory driving. Note that 125 dB has been established as the Level B harassment zone isopleth for vibratory driving since ambient noise levels near the POA are likely to be above 120 dB RMS and this value has been used previously as a threshold in this area. Disturbance zones provide utility for monitoring conducted for mitigation purposes (*i.e.,* shutdown zone monitoring) by establishing monitoring protocols for areas adjacent to the shutdown zones. Monitoring of disturbance zones enables observers to be aware of and communicate the presence of marine mammals in the project area but outside the shutdown zone and thus prepare for potential shutdowns of activity. However, the primary purpose of disturbance zone monitoring is for documenting incidents of Level B harassment; disturbance zone monitoring is discussed in greater detail later (see ''Proposed Monitoring and Reporting''). Nominal radial distances for disturbance zones are shown in Table 5. Given the size of the disturbance zone for vibratory pile driving, it is impossible to guarantee that all animals would be observed or to make comprehensive observations of fine-scale behavioral reactions to sound. We discuss monitoring objectives and protocols in greater depth in ''Proposed Monitoring and Reporting.''

In order to document observed incidents of harassment, monitors record all marine mammal observations, regardless of location. The observer's location, as well as the location of the pile being driven, is known from a GPS. The location of the animal is estimated as a distance from the observer, which is then compared to the location from the pile and the ZOIs for relevant activities (*i.e.,* pile installation). This information may then be used to extrapolate observed takes to reach an approximate understanding of actual total takes.

Soft Start—The use of a soft start procedure is believed to provide additional protection to marine mammals by warning or providing a chance to leave the area prior to the hammer operating at full capacity, and typically involves a requirement to initiate sound from the hammer for 15 seconds at reduced energy followed by a waiting period. This procedure is repeated two additional times. It is difficult to specify the reduction in energy for any given hammer because of variation across drivers and, for impact hammers, the actual number of strikes at reduced energy will vary because operating the hammer at less than full power results in ''bouncing'' of the hammer as it strikes the pile, resulting in multiple ''strikes.'' The project will utilize soft start techniques for both impact and vibratory pile driving. POA will initiate sound from vibratory hammers for fifteen seconds at reduced energy followed by a 1 minute waiting period, with the procedure repeated two additional times. For impact driving, we require an initial set of three strikes from the impact hammer at reduced energy, followed by a thirty-second waiting period, then two subsequent three strike sets. Soft start will be required at the beginning of each day's pile driving work and at any time following a cessation of pile driving of 20 minutes or longer (specific to either vibratory or impact driving).

Monitoring and Shutdown for Pile Driving

The following measures would apply to POA's mitigation through shutdown and disturbance zones:

Shutdown Zone—For all pile driving activities, POA will establish a shutdown zone. Shutdown zones are intended to contain the area in which SPLs equal or exceed the 180/90 dB rms acoustic injury criteria, with the purpose being to define an area within which shutdown of activity would occur upon sighting of a marine mammal (or in anticipation of an animal entering the defined area), thus preventing injury of marine mammals. POA, however, will implement a minimum shutdown zone of 100 m radius for all marine mammals around all vibratory and impact pile activity. These precautionary measures would also further reduce the possibility of auditory injury and behavioral impacts as well as limit the unlikely possibility of injury from direct physical interaction with construction operations.

Shutdown for Large Groups—To reduce the chance of POA reaching or exceeding authorized take, and to minimize harassment to beluga whales, in-water pile driving operations will be shut down if a group of five or more beluga whales is sighted within or approaching the Level B harassment 160 dB and 125 dB disturbance zones, as appropriate. If the group is not re-sighted within 20 minutes, pile driving will resume.

Shutdown for Beluga Whale Calves—Beluga whale calves are likely more susceptible to loud anthropogenic noise than juveniles or adults. If a calf is sighted within or approaching a harassment zone, in-water pile driving will cease and will not be resumed until the calf is confirmed to be out of the harassment zone and on a path away from the pile driving. If a calf or the group with a calf is not re-sighted within 20 minutes, pile driving will resume.

Visual Marine Mammal Observation—POA will collect sighting data and behavioral responses to construction for marine mammal species observed in the region of activity during the period of activity. All observers will be trained in marine mammal identification and behaviors and are required to have no other construction-related tasks while conducting monitoring. POA will monitor the shutdown zone and disturbance zone before, during, and after pile driving, with observers located at the best practicable vantage points. Based on our requirements, the Marine Mammal Monitoring Plan would implement the following procedures for pile driving:

- Four MMOs will work concurrently in rotating shifts to provide full coverage for marine mammal monitoring during in-water pile installation activities for the Test Pile Program. MMOs will work in four-person teams to increase the probability of detecting marine mammals and to confirm sightings. Three MMOs will scan the Level A and Level B harassment zones surrounding pile-driving activities for marine mammals by using big eye binoculars (25X), hand-held binoculars (7X), and the naked eye. One MMO will focus on the Level A harassment zone and two others will scan the Level B zone. Four MMOs will rotate through these three active positions every 30 minutes to reduce eye strain and increase observer alertness. The fourth MMO will record data on the computer, a less-strenuous activity that will provide the opportunity for some rest. A theodolite will also be available for use.
- In order to more effectively monitor the larger Level B harassment zone for vibratory pile driving, one or more MMOs shall be placed on one of the vessels used for hydroacoustic monitoring, which will be stationed offshore.
- Before the Test Pile Program commences, MMOs and POA authorities will meet to determine the most appropriate observation platform(s) for monitoring during pile driving. Considerations will include:
  - Height of the observation platform, to maximize field of view and distance
  - Ability to see the shoreline, along which beluga whales commonly travel

○ Safety of the MMOs, construction crews, and other people present at the POA

○ Minimizing interference with POA activities

Height and location of an observation platform are critical to ensuring that MMOs can adequately observe the harassment zone during pile installation. The platform should be mobile and able to be relocated to maintain maximal viewing conditions as the construction site shifts along the waterfront. Past monitoring efforts at the POA took place from a platform built on top of a cargo container or a platform raised by an industrial scissor lift. A similar shore-based, raised, mobile observation platform will likely be used for the Test Pile Program.

• POA will monitor a 100-meter ''shutdown'' zone during all pile-driving operations (vibratory and impact) to prevent Level A take by injury. If a marine mammal passes the 100-meter shutdown zone prior to the cessation of in-water pile installation but does not reach the Level A harassment zone, which is 14 m for pinnipeds 63 m for cetaceans, there is no Level A take.

• MMOs will begin observing for marine mammals within the Level A and Level B harassment zones for 20 minutes before ''the soft start'' begins. If a marine mammal(s) is present within the 100-meter shutdown zone prior to the ''soft start'' or if marine mammal occurs during ''soft start'' pile driving will be delayed until the animal(s) leaves the 100-meter shutdown zone. Pile driving will resume only after the MMOs have determined, through sighting or by waiting 20 minutes, that the animal(s) has moved outside the 100-meter shutdown zone. After 20 minutes, when the MMOs are certain that the 100-meter shutdown zone is clear of marine mammals, they will authorize the soft start to begin.

• If a marine mammal is traveling along a trajectory that could take it into the Level B harassment zone, the MMO will record the marine mammal(s) as a ''take'' upon entering the Level B harassment zone. While the animal remains within the Level B harassment zone, that pile segment will be completed without cessation, unless the animal approaches the 100-meter shutdown zone, at which point the MMO will authorize the immediate shutdown of in-water pile driving before the marine mammal enters the 100-meter shutdown zone. Pile driving will resume only once the animal has left the 100-meter shutdown zone on its own or has not been resighted for a period of 20 minutes.

• Beluga whale calves are likely more susceptible to loud anthropogenic noise than juveniles or adults. If a calf is sighted approaching a harassment zone, in-water pile driving will cease and not resume until the calf is confirmed to be out of the harassment zone and on a path away from the pile driving. If a calf or the group with a calf is not re-sighted within 20 minutes, pile driving may resume.

• If waters exceed a sea-state which restricts the observers' ability to make observations within the marine mammal shutdown zone (the 100 meter radius) (*e.g.* excessive wind or fog), impact pile installation will cease until conditions allow the resumption of monitoring.

• The waters will be scanned 20 minutes prior to commencing pile driving at the beginning of each day, and prior to commencing pile driving after any stoppage of 20 minutes or greater. If marine mammals enter or are observed within the designated marine mammal buffer zone (the 100m radius) during or 20 minutes prior to pile driving, the monitors will notify the on-site construction manager to not begin until the animal has moved outside the designated radius.

• The waters will continue to be scanned for at least 20 minutes after pile driving has completed each day.

Mitigation Conclusions

NMFS has carefully evaluated the applicant's proposed mitigation measures and considered a range of other measures in the context of ensuring that NMFS prescribes the means of affecting the least practicable impact on the affected marine mammal species and stocks and their habitat. Our evaluation of potential measures included consideration of the following factors in relation to one another:

• The manner in which, and the degree to which, the successful implementation of the measure is expected to minimize adverse impacts to marine mammals

• The proven or likely efficacy of the specific measure to minimize adverse impacts as planned

• The practicability of the measure for applicant implementation,

Any mitigation measure(s) prescribed by NMFS should be able to accomplish, have a reasonable likelihood of accomplishing (based on current science), or contribute to the accomplishment of one or more of the general goals listed below:

1. Avoidance or minimization of injury or death of marine mammals wherever possible (goals 2, 3, and 4 may contribute to this goal).

2. A reduction in the numbers of marine mammals (total number or number at biologically important time or location) exposed to received levels of pile driving, or other activities expected to result in the take of marine mammals (this goal may contribute to 1, above, or to reducing harassment takes only).

3. A reduction in the number of times (total number or number at biologically important time or location) individuals would be exposed to received levels of pile driving, or other activities expected to result in the take of marine mammals (this goal may contribute to 1, above, or to reducing harassment takes only).

4. A reduction in the intensity of exposures (either total number or number at biologically important time or location) to received levels of pile driving, or other activities expected to result in the take of marine mammals (this goal may contribute to a, above, or to reducing the severity of harassment takes only).

5. Avoidance or minimization of adverse effects to marine mammal habitat, paying special attention to the food base, activities that block or limit passage to or from biologically important areas, permanent destruction of habitat, or temporary destruction/disturbance of habitat during a biologically important time.

6. For monitoring directly related to mitigation—an increase in the probability of detecting marine mammals, thus allowing for more effective implementation of the mitigation.

Based on our evaluation of the applicant's proposed measures, as well as other measures considered by NMFS, our preliminarily determination is that the proposed mitigation measures provide the means of effecting the least practicable impact on marine mammals species or stocks and their habitat, paying particular attention to rookeries, mating grounds, and areas of similar significance.

Proposed Monitoring and Reporting

In order to issue an ITA for an activity, section 101(a)(5)(D) of the MMPA states that NMFS must set forth, ''requirements pertaining to the monitoring and reporting of such taking.'' The MMPA implementing regulations at 50 CFR 216.104 (a)(13) indicate that requests for ITAs must include the suggested means of accomplishing the necessary monitoring and reporting that will result in increased knowledge of the species and of the level of taking or impacts on populations of marine mammals that are expected to be present in the proposed

action area. POA submitted a marine mammal monitoring plan as part of the IHA application. It can be found at *http://www.nmfs.noaa.gov/pr/permits/incidental/construction.htm.*

Monitoring measures prescribed by NMFS should accomplish one or more of the following general goals:

1. An increase in the probability of detecting marine mammals, both within the mitigation zone (thus allowing for more effective implementation of the mitigation) and in general to generate more data to contribute to the analyses mentioned below;

2. An increase in our understanding of how many marine mammals are likely to be exposed to levels of pile driving that we associate with specific adverse effects, such as behavioral harassment, TTS, or PTS;

3. An increase in our understanding of how marine mammals respond to stimuli expected to result in take and how anticipated adverse effects on individuals (in different ways and to varying degrees) may impact the population, species, or stock (specifically through effects on annual rates of recruitment or survival) through any of the following methods:

- Behavioral observations in the presence of stimuli compared to observations in the absence of stimuli (need to be able to accurately predict received level, distance from source, and other pertinent information);
- Physiological measurements in the presence of stimuli compared to observations in the absence of stimuli (need to be able to accurately predict received level, distance from source, and other pertinent information);
- Distribution and/or abundance comparisons in times or areas with concentrated stimuli versus times or areas without stimuli;

4. An increased knowledge of the affected species; and

5. An increase in our understanding of the effectiveness of certain mitigation and monitoring measures.

Acoustic Monitoring

The POA will conduct acoustic monitoring for impact pile driving to determine the actual distances to the 190 dB re 1μPa rms, 180 dB re 1μPa rms, and 160 dB re 1μPa rms isopleths, which are used by NMFS to define the Level A injury and Level B harassment zones for pinnipeds and cetaceans for impact pile driving. Encapsulated bubble curtains and resonance-based attenuation systems will be tested during installation of some piles to determine their relative effectiveness at attenuating underwater noise. The POA will also conduct acoustic monitoring for vibratory pile driving to determine the actual distance to the 120 dB re 1μPa rms isopleth for behavioral harassment relative to background levels (estimated to be 125 dB re 1μPa in the project area).

A typical daily sequence of operations for an acoustic monitoring day will include the following activities:

- Discussion of the day's pile-driving plans with the crew chief or appropriate contact and determination of setup locations for the fixed positions. Considerations include the piles to be driven and anticipated barge movements during the day.
- Calibration of hydrophones.
- Setup of the near (10-meter) system either on the barge or the existing dock.
- Deployment of an autonomous or cabled hydrophone at one of the distant locations.
- Recording pile driving operational conditions throughout the day.
- Upon conclusion of the day's pile driving, retrieve the remote systems, post-calibrate all the systems, and download all systems.
- A stationary hydrophone recording system will be suspended either from the pile driving barge or existing docks at approximately 10 meters from the pile being driven, for each pile driven. These data will be monitored in real-time.
- Prior to monitoring, a standard depth sounder will record depth before pile driving commences. The sounder will be turned off prior to pile driving to avoid interference with acoustic monitoring. Once the monitoring has been completed, the water depth will be recorded.
- A second stationary hydrophone will be deployed across the Knik Arm near Port MacKenzie, approximately 2,800–3,200 meters from the pile, from either an anchored floating raft or an autonomous hydrophone recorder package (Figure 13–2 and Figure 13–3 in Application). At 3,000 meters, the hydrophone will be located in the water approximately three-quarters of the way across Knik Arm. The autonomous hydrophone is a self-contained system that is anchored and suspended from a float. Data collected using this system will not be in real-time; the distant hydrophones will collect a continuous recording of the noise produced by the piles being driven.

Vessel-based Hydrophones (One to Two Locations):

- An acoustic vessel with a single-channel hydrophone will be in the Knik Arm open water environment to monitor near-field and real-time isopleths for marine mammals (Figure 13–1, Figure 13–4 in Application).
- Continuous measurements will be made using a sound level meter.
- One or two acoustic vessels are proposed to deploy hydrophones that will be used to collect data to estimate the distance to far-field sound levels (*i.e.,* the 120–125-dB zone for vibratory and 160-dB zone for impact driving).
- During the vessel-based recordings, the engine and any depth finders must be turned off. The vessel must be silent and drifting during spot recordings.
- Either a weighted tape measure or an electronic depth finder will be used to determine the depth of the water before measurement and upon completion of measurements. A GPS unit or range finder will be used to determine the distance of the measurement site to the piles being driven.
- Prior to and during the pile-driving activity, environmental data will be gathered, such as water depth and tidal level, wave height, and other factors, that could contribute to influencing the underwater sound levels (*e.g.,* aircraft, boats, etc.). Start and stop time of each pile-driving event and the time at which the bubble curtain is turned on and off will be logged.
- The construction contractor will provide relevant information, in writing, to the hydroacoustic monitoring contractor for inclusion in the final monitoring report:

Data Collection

MMOs will use approved data forms. Among other pieces of information, POA will record detailed information about any implementation of shutdowns, including the distance of animals to the pile and description of specific actions that ensued and resulting behavior of the animal, if any. In addition, POA will attempt to distinguish between the number of individual animals taken and the number of incidents of take. At a minimum, the following information would be collected on the sighting forms:

- Date and time that monitored activity begins or ends;
- Construction activities occurring during each observation period;
- Weather parameters (*e.g.,* percent cover, visibility);
- Water conditions (*e.g.,* sea state, tide state);
- Species, numbers, and, if possible, sex and age class of marine mammals;
- Description of any observable marine mammal behavior patterns, including bearing and direction of travel and distance from pile driving activity;
- Distance from pile driving activities to marine mammals and distance from

the marine mammals to the observation point;

- Locations of all marine mammal observations; and
- Other human activity in the area.

Reporting Measures

POA would provide NMFS with a draft monitoring report within 90 days of the conclusion of the proposed construction work or 60 days prior to any subsequent authorization, whichever is sooner. A monitoring report is required before another authorization can be issued to POA. This report will detail the monitoring protocol, summarize the data recorded during monitoring, and estimate the number of marine mammals that may have been harassed. If no comments are received from NMFS within 30 days, the draft final report will constitute the final report. If comments are received, a final report must be submitted within 30 days after receipt of comments.

In the unanticipated event that the specified activity clearly causes the take of a marine mammal in a manner prohibited by the IHA (if issued), such as an injury, serious injury or mortality (*e.g.,* ship-strike, gear interaction, and/or entanglement), POA would immediately cease the specified activities and report the incident to the Chief of the Permits and Conservation Division, Office of Protected Resources, NMFS, and the Alaska Regional Stranding Coordinators. The report would include the following information:

- Time, date, and location (latitude/longitude) of the incident;
- Name and type of vessel involved;
- Vessel's speed during and leading up to the incident;
- Description of the incident;
- Status of all sound source use in the 24 hours preceding the incident;
- Water depth;
- Environmental conditions (*e.g.,* wind speed and direction, Beaufort sea state, cloud cover, and visibility);
- Description of all marine mammal observations in the 24 hours preceding the incident;
- Species identification or description of the animal(s) involved;
- Fate of the animal(s); and
- Photographs or video footage of the animal(s) (if equipment is available).

Activities would not resume until NMFS is able to review the circumstances of the prohibited take. NMFS would work with POA to determine what is necessary to minimize the likelihood of further prohibited take and ensure MMPA compliance. POA would not be able to resume their activities until notified by NMFS via letter, email, or telephone.

In the event that POA discovers an injured or dead marine mammal, and the lead MMO determines that the cause of the injury or death is unknown and the death is relatively recent (*i.e.,* in less than a moderate state of decomposition as described in the next paragraph), POA would immediately report the incident to the Chief of the Permits and Conservation Division, Office of Protected Resources, NMFS, and the NMFS Alaska Stranding Hotline and/or by email to the Alaska Regional Stranding Coordinators. The report would include the same information identified in the paragraph above. Activities would be able to continue while NMFS reviews the circumstances of the incident. NMFS would work with POA to determine whether modifications in the activities are appropriate.

In the event that POA discovers an injured or dead marine mammal, and the lead MMO determines that the injury or death is not associated with or related to the activities authorized in the IHA (*e.g.,* previously wounded animal, carcass with moderate to advanced decomposition, or scavenger damage), POA would report the incident to the Chief of the Permits and Conservation Division, Office of Protected Resources, NMFS, and the NMFS Alaska Stranding Hotline and/or by email to the Alaska Regional Stranding Coordinators, within 24 hours of the discovery. POA would provide photographs or video footage (if available) or other documentation of the stranded animal sighting to NMFS and the Marine Mammal Stranding Network.

Estimated Take by Incidental Harassment

Except with respect to certain activities not pertinent here, section 3(18) of the MMPA defines ''harassment'' as: ''Any act of pursuit, torment, or annoyance which (i) has the potential to injure a marine mammal or marine mammal stock in the wild [Level A harassment]; or (ii) has the potential to disturb a marine mammal or marine mammal stock in the wild by causing disruption of behavioral patterns, including, but not limited to, migration, breathing, nursing, breeding, feeding, or sheltering [Level B harassment].''

All anticipated takes would be by Level B harassment resulting from vibratory pile driving and impact pile driving and are likely to involve temporary changes in behavior. Physical injury or lethal takes are not expected due to the expected source levels and sound source characteristics associated with the activity, and the proposed mitigation and monitoring measures are expected to further minimize the possibility of such take.

Given the many uncertainties in predicting the quantity and types of impacts of sound on marine mammals, it is common practice to estimate how many animals are likely to be present within a particular distance of a given activity, or exposed to a particular level of sound, where NMFS believes take is likely.

Upland work can generate airborne sound and create visual disturbance that could potentially result in disturbance to marine mammals (specifically, pinnipeds) that are hauled out or at the water's surface with heads above the water. However, because there are no regular haul-outs in the vicinity of the site of the proposed project area, we believe that incidents of incidental take resulting from airborne sound or visual disturbance are unlikely.

POA has requested authorization for the incidental taking of small numbers of Steller sea lion, harbor seal, harbor porpoise, killer whale and beluga whale near the project area that may result from vibratory and impact pile driving during activities associated with a Test Pile Program.

In order to estimate the potential incidents of take that may occur incidental to the specified activity, we must first estimate the extent of the sound field that may be produced by the activity and then consider in combination with information about marine mammal density or abundance in the project area. We first provide information on applicable sound thresholds for determining effects to marine mammals before describing the information used in estimating the sound fields, the available marine mammal density or abundance information, and the method of estimating potential incidences of take.

Sound Thresholds

We use generic sound exposure thresholds to determine when an activity that produces sound might result in impacts to a marine mammal such that a take by harassment might occur. To date, no studies have been conducted that explicitly examine impacts to marine mammals from pile driving sounds or from which empirical sound thresholds have been established. These thresholds (Table 4) are used to estimate when harassment may occur (*i.e.,* when an animal is exposed to levels equal to or exceeding the relevant criterion) in specific contexts; however, useful contextual information that may inform our assessment of effects is typically lacking and we consider these thresholds as step functions. NMFS is

working to revise these acoustic guidelines; for more information on that process, please visit *www.nmfs.noaa.gov/pr/acoustics/guidelines.htm.*

TABLE 4—UNDERWATER INJURY AND DISTURBANCE THRESHOLD DECIBEL LEVELS FOR MARINE MAMMALS

Criterion	Criterion definition	Threshold *
Level A harassment	PTS (injury) **	190 dB RMS for pinnipeds. 180 dB RMS for cetaceans.
Level B harassment	Behavioral disruption for impulse noise (*e.g.,* impact pile driving).	160 dB RMS.
Level B harassment	Behavioral disruption for non-pulse noise (*e.g.,* vibratory pile driving, drilling).	125 dB RMS ***.

* All decibel levels referenced to 1 micropascal (re: 1 μPa). Note all thresholds are based off root mean square (RMS) levels
** PTS=Permanent Threshold Shift conservatively based on TTS (Temporary Threshold Shift)
*** Assuming ambient background noise of 125 dB RMS. Usually 120 dB RMS

Distance to Sound Thresholds

Underwater Sound Propagation Formula—Pile driving generates underwater noise that can potentially result in disturbance to marine mammals in the project area. Transmission loss (TL) is the decrease in acoustic intensity as an acoustic pressure wave propagates out from a source. TL parameters vary with frequency, temperature, sea conditions, current, source and receiver depth, water depth, water chemistry, and bottom composition and topography. This formula neglects loss due to scattering and absorption, which is assumed to be zero here. The degree to which underwater sound propagates away from a sound source is dependent on a variety of factors, most notably the water bathymetry and presence or absence of reflective or absorptive conditions including in-water structures and sediments. Spherical spreading occurs in a perfectly unobstructed (free-field) environment not limited by depth or water surface, resulting in a 6 dB reduction in sound level for each doubling of distance from the source (20*log[range]). Cylindrical spreading occurs in an environment in which sound propagation is bounded by the water surface and sea bottom, resulting in a reduction of 3 dB in sound level for each doubling of distance from the source (10*log[range]). A practical spreading value of fifteen is often used in the absence of reliable data and under conditions where water increases with depth as the receiver moves away from the shoreline, resulting in an expected propagation environment that would lie between spherical and cylindrical spreading loss conditions. Practical spreading loss (4.5 dB reduction in sound level for each doubling of distance) is assumed here.

A review of underwater sound measurements for similar projects was undertaken to estimate the near-source sound levels for vibratory and impact pile driving at POA. Sounds from similar-sized steel shell piles have been measured in water for several projects. Measurements conducted for the US Navy Explosive Handling Wharf in the Hood Canal, in the Puget Sound at Naval Base Kitsap-Bangor, Washington, are most representative due to the similar pile size and depth of water at the site. Underwater sound levels at 10 m for 48-inch-diameter pile installation was measured at 164 dB RMS for vibratory driving and 192 dB RMS for impact driving (Illingsworth & Rodkin 2012, 2013). This data was used to calculate distances to Level A and Level B thresholds.

The formula for transmission loss is TL = X log10 (R/10), where R is the distance from the source assuming the near source levels are measured at 10 meters (33 feet) and X is the practical spreading loss value. This TL model, based on the default practical spreading loss assumption, was used to predict distances to isopleths for Level A injury and Level B harassment (Table 5). Pile-driving sound measurements recorded during the Test Pile Program will further refine the rate of sound propagation or TL and help inform the APMP marine mammal monitoring strategy.

TABLE 5—DISTANCES IN METERS TO NMFS' LEVEL A (INJURY) AND LEVEL B HARASSMENT THRESHOLDS (ISOPLETHS) FOR A 48-INCH-DIAMETER PILE, ASSUMING A 125-dB BACKGROUND NOISE LEVEL

Pile diameter (inches)	Impact			Vibratory		
	Pinniped, level A injury 190 dB	Cetacean, level A injury 180 dB	Level B harassment 160 dB	Pinniped, level A injury 190 dB	Cetacean, level A injury 180 dB	Level B harassment 125 dB
48, unattenuated	14 m	63 m	1,359 km	<10 m	<10 m	3,981 m

The distances to the Level B harassment and Level A injury isopleths were used to estimate the areas of the Level B harassment and Level A injury zones for an unattenuated a 48-inch pile. Note that 125 dB was used as the Level B harassment zone isopleth since ambient noise is likely elevated in that area. Distances and areas were calculated for both vibratory and impact pile driving, and for cetaceans and pinnipeds. Geographic information system software was used to map the Level B harassment and Level A injury isopleths from each of the six indicator test pile locations. Land masses near the POA, including Cairn Point, the North Extension, and Port MacKenzie, act as barriers to underwater noise and prevent further spread of sound pressure waves. As such, the harassment zones for each threshold were truncated and modified with consideration of these impediments to sound transmission (See Figures 6–1—6–6 in the Application). The measured areas (Table 6) were then used in take calculations for beluga whales. Although sound attenuation methods will be used during pile installation, it

is unknown how effective they will be and for how many hours they will be utilized. Therefore, to estimate potential exposure of beluga whales, the areas of the harassment zones for impact and vibratory pile driving with no sound attenuation were used.

TABLE 6—AREAS OF THE LEVEL A INJURY ZONES AND LEVEL B HARASSMENT ZONES *

	Impact					
	Pinniped, level A injury	Cetacean, level A injury	Level B harassment			
			Indicator test piles	190 dB	180 dB	160 dB
Piles 3 and 4	<0.01 km²	<0.01 km²	2.24 km²	0 km²	0 km²	15.54 km²
Pile 1			2.71 km²			19.54 km²
Pile 2			2.76 km²			20.08 km²
Pile 5 and 6			2.79 km²			20.90 km²
Pile 7			2.80 km²			20.95 km²
Piles 8, 9, 10			3.03 km²			22.14 km²

* Based on the distances to sound isopleths for a 48-inch-diameter pile, assuming a 125-dB background noise level.

Incidental take is estimated for each species by estimating the likelihood of a marine mammal being present within a ZOI, described earlier in the mitigation section, during active pile driving. Monitoring data recorded for the MTRP were used to estimate daily sighting rates for harbor seals and harbor porpoises in the project area (See Table 4–1 and 4–2 in Application). Sighting rates of harbor seals and harbor porpoises were highly variable, and there was some indication that reported sighting rates may have increased during the years of MTRP monitoring. It is unknown whether any increase, if real, were due to local population increases or habituation to on-going construction activities. Shelden *et al.* (2014) reported evidence of increased abundance of harbor porpoise in upper Cook Inlet, which may have contributed to this pattern. As a conservative measure, the highest monthly individual sighting rate for any recorded year was used to quantify take of harbor seals and harbor porpoises for pile driving associated with the Test Pile Program.

The pile driving take calculation for all harbor seal and harbor porpoise exposures is: Exposure estimate = (N) * # days of pile driving per site, where:

N = highest daily abundance estimate for each species in project area

Take for Steller sea lions was estimated based on three sightings of what was likely a single individual. Take for killer whales was estimated based on their known occasional presence in the project area, even though no killer whales were observed during past MTRP monitoring efforts.

Beluga Whale

Aerial surveys for beluga whales in Cook Inlet were completed in June and July from 1993 through 2008 (Goetz *et al.* 2012). Data from these aerial surveys were used along with depth soundings, coastal substrate type, an environmental sensitivity index, an index of anthropogenic disturbance, and information on anadromous fish streams to develop a predictive beluga whale habitat model (Goetz *et al.* 2012). Three different beluga distribution maps were produced from the habitat model based on sightings of beluga whales during aerial surveys. First, the probability of beluga whale presence was mapped using a binomial (*i.e.,* yes or no) distribution and the results ranged from 0.00 to 0.01. Second, the expected group size was mapped. Group size followed a Poisson distribution, which ranged from 1 to 232 individuals in a group. Third, the product (*i.e.,* multiplication) of these predictive models produced an expected density model, with beluga whale densities ranging from 0 to 1.12 beluga whales/km². From this model Goetz *et al.* (2012) developed a raster GIS dataset which provides a predicted density of beluga whales throughout Cook Inlet at a scale of one square kilometer (See Figure 6–7 in the Application). Habitat maps for beluga whale presence, group size, and density (beluga whales/km²) were produced from these data and resulting model, including a raster Geographic Information System data set, which provides a predicted density of beluga whales throughout Cook Inlet at a 1-km² scale grid.

The numbers of beluga whales potentially exposed to noise levels above the Level B harassment thresholds for impact (160 dB) and vibratory (125 dB) pile driving were estimated using the following formula:

Beluga Exposure Estimate = N * Area * # days of pile driving where:

N = maximum predicted # of beluga whales/km²

Area = Area of Isopleth (area in km² within the 160-dB isopleth for impact pile driving, or area in km² within the 125-dB isopleth for vibratory pile driving); (Table 6)

The beluga whale exposure estimate was calculated for each of the six indicator test pile locations separately, because the area of each isopleth was different for each location. The predicted beluga whale density raster (developed by Goetz *et al.* 2012) was overlaid with the isopleth areas for each of the indicator test pile locations. The maximum predicted beluga whale density within each area of isopleth was then used to calculate the beluga whale exposure estimate for each of the indicator test pile locations. The maximum density values ranged from 0.031 to 0.063 beluga whale/km².

The area values from Table 6 were multiplied by these maximum predicted densities. The final step in the equation is to account for the number of days of exposure. As discussed in Section 1.2, the maximum number of days of impact pile driving, plus a 25 percent contingency, is 31 days. As such, the predicted exposure estimate for each of the 10 indicator test piles was multiplied by 3.1 to account for the number of days of exposure. The maximum number of days of vibratory pile driving (10), plus a 25 percent contingency, is 12.5 days. As such, the predicted exposure estimate for each indicator test pile was multiplied by 1.25 to account for the number of days of exposure. The total estimated exposure of beluga whales to Level B harassment from impact pile driving (160 dB) is 3.884. The total estimated exposure of beluga whales to Level B harassment from vibratory pile driving (125 dB) is 15.361. The expected number of beluga whale exposures for

each indicator test pile and total exposure estimates is shown in Table 7.

TABLE 7—MAXIMUM PREDICTED BELUGA WHALE DENSITIES AND EXPOSURE ESTIMATES WITHIN EACH OF THE SIX UNIQUE ISOPLETH AREAS

Indicator test pile	Impact driving (160 dB) maximum density (whales/km^2)	Vibratory driving (125dB) maximum density (whales/km^2)	Impact driving exposure estimate	Vibratory driving exposure estimate
3,4	0.031	0.056	0.428	2.191
1	0.042	0.063	0.350	1.541
2	0.038	0.062	0.329	1.550
5,6	0.062	0.062	1.066	3.225
7	0.062	0.062	0.536	1.617
8,9,19	0.042	0.063	1.175	5.238
Total Exposure Estimates	.....	.....	3.884	15.361

Based on predicted beluga whale density in the vicinity of the POA, an estimated total of 19.245 beluga whales could be exposed to noise levels at the Level B harassment level during vibratory and impact pile driving (Table 7).

Beluga whale distribution in Cook Inlet is much more clumped than is portrayed by the estimated density model (See Figure 6–7 in Application). Beluga whales are highly mobile animals that move based on tidal fluctuations, prey abundance, season, and other factors. Generally, beluga whales pass through the vicinity of the POA to reach high-quality feeding areas in upper Knik Arm or at the mouth of the Susitna River. Although beluga whales may occasionally linger in the vicinity of the POA, they typically transit through the area. It is important to note that the instantaneous probability of observing a beluga whale at any given time is extremely low (0.0 to 0.01) based on the Goetz *et al.* (2012) model; however, the probability of observing a beluga whale can change drastically and increase well above predicted values based on season, prey abundance, tide stage, and other variables. The Goetz *et al.* (2012) density model is the best available information for upper Cook Inlet and for the estimation of beluga whale density across large areas. However, in order to account for the clumped and highly variable distribution of beluga whales, we have accounted for large groups to improve our estimate of exposure.

During previous POA monitoring, large groups of beluga whales were seen swimming through the POA vicinity. Based on reported takes in monitoring reports from 2008 through 2011, groups of beluga whales were occasionally taken by Level B harassment during previous POA activities (See Table 6–9 in Application).

During past monitoring efforts, an occasional group of animals was observed, and on three occasions, groups of five beluga whales or more were observed (See Table 6–9 in Application). Therefore, the use of the beluga exposure estimate formula alone does not account for larger groups of beluga whales that could be taken, and does not work well for calculating relatively minor, short-term construction events involving small population densities or infrequent occurrences of marine mammals.

The beluga density estimate used for estimating potential beluga exposures does not accurately reflect the reality that beluga whales can travel in large groups. As a contingency that a large group of beluga whales could occur in the project area, NMFS buffered the exposure estimate detailed in the preceding by adding the estimated size of a notional large group of beluga whales. Incorporation of large groups into the beluga whale exposure estimate is intended to reduce risk to the Test Pile Program of the unintentional take of a larger number of belugas than would be authorized by using the density method alone. A common convention in statistics and other fields is use of the 95th percentile to evaluate risk. Use of the 95th percentile of group size to define a large group of beluga whales, which can be added to the estimate of exposure, calculated by the density method, provides a conservative value that reduces the risk to the POA of taking a large group of beluga whales and exceeding authorized take levels. A single large group has been added to the estimate of exposure for beluga whales based on the density method, in the anticipation that the entry of a large group of beluga whales into a Level B harassment zone would take place, at most, one time during the project. To determine the most appropriate size of a large group, two sets of data were examined: (1) Beluga whale sightings collected opportunistically by POA employees since 2008 (See Table 6–10 in Application), and (2) Alaska Pacific University (APU) scientific monitoring that occurred from 2007 through 2011 (See Table 6–11, Figure 1–1 in Application). It is important to understand how data were collected for each data set to assess how the data can be used to determine the size of a large group.

POA employees are encouraged to document opportunistic sightings of beluga whales in a logbook. This has resulted in a data set of beluga sightings that spans all months over many years, and includes estimates of group size. Observations were not conducted systematically or from the same location, and this data set is likely to be biased in that smaller groups or individual whales are less likely to be sighted than larger groups. However, the data set contains good information on relative frequency of sightings and maximum group sizes. The APU data were collected systematically by dedicated observers, and bias against small groups is likely less than for the POA opportunistic sightings. However, the APU data were collected over a more limited range of dates, and sampling effort was less in April and May, when the Test Pile Program is scheduled. Both data sets are useful for assessing beluga group size in the POA area.

The APU scientific monitoring data set documents 390 beluga whale sightings. Group size exhibits a mode of 1 and a median of 2, indicating that over

half of the beluga groups observed over the 5-year span of the monitoring program were of individual beluga whales or groups of 2. As expected, the opportunistic sighting data from the POA do not reflect this preponderance of small groups. The POA opportunistic data do indicate, however, that large groups of belugas were regularly seen in the area over the past 7 years, and that group sizes ranged as high as 100 whales. Of the 131 sightings documented in the POA opportunistic data set, 48 groups were of 15 or more beluga whales.

The 95th percentile of group size for the APU scientific monitoring data is 11.1 beluga whales (rounded up to 12 beluga whales). This means that, of the 390 documented beluga whale groups in this data set, 95 percent consisted of fewer than 11.1 whales; 5 percent of the groups consisted of more than 11.1 whales. Therefore, it is improbable that a group of more than 12 beluga whales would occur during the Test Pile Program. This number balances reduced risk to the POA with protection of beluga whales. POA opportunistic observations indicate that many groups of greater than 12 beluga whales commonly transit through the project area. APU scientific monitoring data indicate that 5 percent of their documented groups consisted of greater than 12 beluga whales. To reduce the chance of the POA reaching or exceeding authorized take, and to minimize harassment to beluga whales, in-water pile driving operations will be shut down if a group of 5 or more beluga whales is sighted approaching the Level B harassment 160 dB and 125 dB isopleths. Although POA would shut down for groups of 5 or more belugas, NMFS assumes here that a large group occurring in the far reaches of the ZOI may not be observed by the MMOs.

The total number of proposed takes of Cook Inlet beluga whales is, therefore, 19.245 (density method) plus 12 (large group method) rounded up to a conservative 32 total incidents of take. No Level A harassment is expected or proposed.

Harbor Seal

Airborne noise was not considered in this analysis since no known harbor seal haul-out or pupping sites occur in the vicinity of the POA. With the exception of newborn pups, all ages and sexes of harbor seals could occur in the project area for the duration of the Test Pile Program. However, harbor seals are not known to regularly reside in the POA area. For these reasons, any harassment to harbor seals during test pile driving will primarily involve a limited number of individuals that may potentially swim through the project area. Harbor seals that are disturbed by noise may change their behavior and be temporarily displaced from the project area for the short duration of test pile driving.

The maximum number of harbor seals observed during POA construction monitoring conducted from 2005 through 2011 was 57 individuals, recorded over 104 days of monitoring, from June–November 2011. Based on these observations, sighting rates during the 2011 POA construction monitoring period were 0.55 harbor seal/day. Take by Level B harassment during 31 days of impact and vibratory pile driving for the Test Pile Program is anticipated to be less than 1 harbor seal per day. With in water pile driving occurring for only about 27 hours over those 31 days, the potential for exposure within the 160-dB and 125-dB isopleths is anticipated to be low. Level B take is conservatively estimated at a total of 31 harbor seals (31 days x 1 harbor seal/day) for the duration of the Test Pile Program. Few harbor seals are expected to approach the project area, and this small number of takes is expected to have no more than a negligible effect on individual animals, and no effect on the population as a whole. Level B harassment has the most potential to occur during the mid-summer and fall when anadromous prey fish return to Knik Arm, in particular near Ship Creek south of the POA area. Because the unattenuated 190-dB isopleth is estimated to extend only 14 meters from the source, no Level A harassment take is anticipated or proposed under this authorization.

Steller Sea Lion

Steller sea lions are expected to be encountered in low numbers, if at all, within the project area. Based on the three sightings of what was likely a single individual in the project area in 2009, NMFS proposes an encounter rate of 1 individual every 5 pile driving days. The proposed Test Pile Program will drive piles for up to 31 days and, therefore, NMFS proposes the take of up to 6 individuals over the duration of test pile driving activities. Because the unattenuated 190-dB isopleth is estimated to extend only 14 meters from the source, no Level A harassment take is anticipated or proposed.

Harbor Porpoises

Aerial surveys designed specifically to estimate population size for the three management stocks of harbor porpoises in Alaska were conducted in 1997, 1998, and 1999 (Hobbs and Waite 2010). As part of the overall effort, Cook Inlet harbor porpoises were surveyed 9–15 June 1998 by NMFS as part of their annual beluga whale survey effort (Hobbs and Waite 2010; Rugh *et al.* 2000). The survey yielded an average harbor porpoise density in Cook Inlet of 0.013 harbor porpoise/km^2, with a coefficient of variation of 13.2 percent. Although the survey transited both upper and lower Cook Inlet, harbor porpoise sightings were limited to 8, all of which were south of Tuxedni Bay, in lower Cook Inlet; no harbor porpoises were sighted during this survey in upper Cook Inlet. Given the summer timing of this survey effort and lack of upper Cook Inlet sightings, NMFS determined that use of this density for estimating take of harbor porpoises in association with the Test Pile Program, which is planned for the fall season, will not be appropriate.

Harbor porpoise sighting rates during the POA pre-construction monitoring period in 2007 were rare, and only four sightings were reported in 2005 (Table 4–2). Harbor porpoise sighting rates in the project area from 2008–2011 during pile driving and other port activities ranged from 0–0.09 harbor porpoise/day. We have rounded this up to 1 harbor porpoise per day. Take by Level B harassment during the Test Pile Program over 31 days of pile driving activity is estimated to be no more than 31 harbor porpoises (31 days $\times$ 1 harbor porpoise/day). Harbor porpoises sometimes travel in small groups, so as a contingency, an additional 6 harbor porpoise takes are estimated, for a total of 37 Level B takes. With in-water pile driving occurring for only about 27 hours over those 31 days, the potential for exposure within the 160-dB and 125-dB isopleths is anticipated to be low. Because the unattenuated 190-dB isopleth is estimated to extend only 63 meters from the source, no Level A take is anticipated, nor requested under this authorization.

Killer Whales

No killer whales were sighted during previous monitoring programs for the Knik Arm Crossing and POA construction projects, based on a review of monitoring reports. The infrequent sightings of killer whales that are reported in upper Cook Inlet tend to occur when their primary prey (anadromous fish for resident killer whales and beluga whales for transient killer whales) are also in the area (Shelden *et al.* 2003).

With in-water pile driving occurring for only about 27 hours over 31 days, the potential for exposure within the Level B harassment isopleths is anticipated to be extremely low. Level B

take is conservatively estimated at no more than 8 killer whales, or two small pods, for the duration of the Test Pile Program. Few killer whales are expected to approach the project area, and this small potential exposure is expected to have no more than a nominal effect on individual animals. Because the unattenuated 180-dB isopleth is estimated to extend only 63 meters from the source, no Level A harassment take is anticipated or proposed.

Analysis and Preliminary Determinations

Negligible Impact

Negligible impact is ''an impact resulting from the specified activity that cannot be reasonably expected to, and is not reasonably likely to, adversely affect the species or stock through effects on annual rates of recruitment or survival'' (50 CFR 216.103). A negligible impact finding is based on the lack of likely adverse effects on annual rates of recruitment or survival (*i.e.,* population-level effects). An estimate of the number of Level B harassment takes, alone, is not enough information on which to base an impact determination. In addition to considering estimates of the number of marine mammals that might be ''taken'' through behavioral harassment, NMFS must consider other factors, such as the likely nature of any responses (their intensity, duration, etc.), the context of any responses (critical reproductive time or location, migration, etc.), as well as the number and nature of estimated Level A harassment takes, the number of estimated mortalities, effects on habitat, and the status of the species.

To avoid repetition, the discussion of our analyses applies to all the species listed in Table 2, given that the anticipated effects of this pile driving project on marine mammals are expected to be relatively similar in nature. Except for beluga whales, where we provide additional discussion, there is no information about the size, status, or structure of any species or stock that would lead to a different analysis for this activity, else species-specific factors would be identified and analyzed.

Pile driving activities associated with the Test Pile Program, as outlined previously, have the potential to disturb or displace marine mammals. Specifically, the specified activities may result in take, in the form of Level B harassment (behavioral disturbance) only, from underwater sounds generated from pile driving. Harassment takes could occur if individuals of these species are present in the ensonified zone when pile driving is happening.

No injury, serious injury, or mortality is anticipated given the nature of the activity and measures designed to minimize the possibility of injury to marine mammals. The potential for these outcomes is minimized through the implementation of the following planned mitigation measures. POA will employ a ''soft start'' when initiating driving activities. Given sufficient ''notice'' through use of soft start, marine mammals are expected to move away from a pile driving source. The likelihood of marine mammal detection ability by trained observers is high under the environmental conditions described for waters around the project area. This further enables the implementation of shutdowns if animals come within 100 meters of operational activity to avoid injury, serious injury, or mortality. POA's proposed activities are localized and of relatively short duration. The total amount of time spent pile driving, including a 25% contingency, will be 27 hours over approximately 31 days.

These localized and short-term noise exposures may cause brief startle reactions or short-term behavioral modification by the animals. These reactions and behavioral changes are expected to subside quickly when the exposures cease.

The project also is not expected to have significant adverse effects on affected marine mammals' habitat, as analyzed in detail in the ''Anticipated Effects on Marine Mammal Habitat'' section. No important feeding and/or reproductive areas for marine mammals other than beluga whales are known to be near the proposed project area. Project-related activities may cause some fish to leave the area of disturbance, thus temporarily impacting marine mammals' foraging opportunities in a limited portion of the foraging range; but, because of the short duration of the activities and the relatively small area of the habitat that may be affected, the impacts to marine mammal habitat are not expected to cause significant or long-term negative consequences.

Beluga whales have been observed transiting past the POA project by both scientific and opportunistic surveys. During the spring and summer when the Test Pile Program is scheduled belugas are generally concentrated near warmer river mouths where prey availability is high and predator occurrence is low (Moore et al. 2000). Data on beluga whale sighting rates, grouping, behavior, and movement indicate that the POA is a relatively low-use area, occasionally visited by lone whales or small groups of whales. They are observed most often at low tide in the fall, peaking in late August to early September. Groups with calves have been observed to enter the POA area, but data do not suggest that the area is an important nursery area. Although POA scientific monitoring studies indicate that the area is not used frequently by many beluga whales, it is apparently used for foraging habitat by whales traveling between lower and upper Knik Arm, as individuals and groups of beluga whales have been observed passing through the area each year during monitoring efforts. Data collected annually during monitoring efforts demonstrated that few beluga whales were observed in July and early August; numbers of sightings increased in mid-August, with the highest numbers observed late August to mid-September. In all years, beluga whales have been observed to enter the project footprint while construction activities were taking place, including pile driving and dredging. The most commonly observed behaviors were traveling, diving, and suspected feeding. No apparent behavioral changes or reactions to in-water construction activities were observed by either the construction or scientific observers (Cornick *et al.* 2011).

Critical habitat for Beluga whales has been identified in the area. However, habitat in the immediate vicinity of the project has been excluded from critical habitat designation. Furthermore the project activities would not modify existing marine mammal habitat. NMFS concludes that both the short-term adverse effects and the long-term effects on Beluga whale prey quantity and quality will be insignificant. The sound from pile driving may interfere with whale passage between lower upper Knik Arm. However, POA is an industrialized area with significant noise from vessel traffic and beluga whales pass through the area unimpeded. Given the low use of the area, lack of observed behavioral changes associated with past construction operations, and nominal impact on critical habitat, NMFS believes that the proposed activity is not expected to impact rates of recruitment or survival for belugas whales and therefore will have a negligible impact on the species.

Effects on individuals that are taken by Level B harassment, on the basis of reports in the literature as well as monitoring from other similar activities, will likely be limited to reactions such as increased swimming speeds, increased surfacing time, or decreased foraging (if such activity were occurring) (*e.g.,* Thorson and Reyff, 2006; Lerma, 2014). Most likely, individuals will

simply move away from the sound source and be temporarily displaced from the areas of pile driving, although even this reaction has been observed primarily only in association with impact pile driving. The pile removal activities analyzed here are similar to, or less impactful than, numerous construction activities conducted in other similar locations, which have taken place with no reported injuries or mortality to marine mammals, and no known long-term adverse consequences from behavioral harassment. Repeated exposures of individuals to levels of sound that may cause Level B harassment here are unlikely to result in hearing impairment or to significantly disrupt foraging behavior. Thus, even repeated Level B harassment of some small subset of the species is unlikely to result in any significant realized decrease in fitness for the affected individuals, and thus would not result in any adverse impact to the stock as a whole. Level B harassment will be reduced to the level of least practicable impact through use of mitigation measures described herein. Finally, if sound produced by project activities is sufficiently disturbing, animals are likely to simply avoid the project area while the activity is occurring.

In summary, this negligible impact analysis is founded on the following factors for beluga whales: (1) The seasonal distribution and habitat use patterns of Cook Inlet beluga whales, which suggest that for much of the time only a small portion of the population would be in the vicinity of the Test Pile Program; (2) the proposed mitigation requirements, including shutdowns for groups of 5 or more belugas as well as for or calves approaching the Level B harassment area to avoid impacts to large numbers of belugas or to calves who may be more susceptible to acoustic impacts; (3) the proposed monitoring requirements and mitigation measures described earlier in this document for all marine mammal species that will further reduce the amount and intensity of takes; and (4) monitoring results from previous activities that indicated low numbers of beluga whale sightings within the Level B disturbance exclusion zone and low levels of Level B harassment takes of other marine mammals.

For marine mammals other than beluga whales the negligible impact analysis is based on the following: (1) The possibility of injury, serious injury, or mortality may reasonably be considered discountable; (2) the anticipated incidents of Level B harassment consist of, at worst, temporary modifications in behavior; (3) the absence of any significant habitat within the project area, including rookeries, significant haul-outs, or known areas or features of special significance for foraging or reproduction; (4) the anticipated efficacy of the proposed mitigation measures in reducing the effects of the specified activity. In combination, we believe that these factors, as well as the available body of evidence from other similar activities, demonstrate that the potential effects of the specified activity will have only short-term effects on individuals. The specified activity is not expected to impact rates of recruitment or survival and will therefore have a negligible impact on those species.

Therefore, based on the analysis contained herein of the likely effects of the specified activity on marine mammals and their habitat, and taking into consideration the implementation of the proposed monitoring and mitigation measures, NMFS preliminarily finds that the total marine mammal take from POA's Test Pile Program will have a negligible impact on the affected marine mammal species or stocks.

Small Numbers

Table 8 indicates the numbers of animals that could be exposed to received noise levels that could cause Level B behavioral harassment from work associated with the proposed Test Pile Program. The analyses provided represents between <0.01% to 10.2% of the populations of these stocks that could be affected by Level B behavioral harassment. These are small numbers of marine mammals relative to the sizes of the affected species and population stocks under consideration.

TABLE 8—SUMMARY OF THE ESTIMATED NUMBERS AND PERCENTAGES OF MARINE MAMMALS POTENTIALLY EXPOSED TO LEVEL B HARASSMENT NOISE LEVELS

Species	Level B harassment (160 or 125 dB)	Population	Percentage of population
Harbor Seal	31	27,836	0.11.
Steller sea lion	6	49,497	<0.01.
Harbor porpoise	37	31,046	0.12.
Killer whale	8	2,347 Resident*	0.34 Resident.
		587 Transient	1.36 Transient.
Beluga whale	32	312	10.2.
Total	114		

*Percentage of population being requested for take is calculated out for the maximum of each killer stock. Eight takes are being requested total for both stocks.

Based on the methods used to estimate take, and taking into consideration the implementation of the mitigation and monitoring measures, we preliminarily find that small numbers of marine mammals will be taken relative to the populations of the affected species or stocks.

Impact on Availability of Affected Species for Taking for Subsistence Uses

Under section 101(a)(5)(D), NMFS must find that the taking will not have an unmitigable adverse impact on the availability of the affected species for taking for subsistence uses. NMFS' implementing regulations define ''unmitigable adverse impact'' as an impact resulting from the specified activity:

(1) That is likely to reduce the availability of the species to a level insufficient for a harvest to meet subsistence needs by:

(i) Causing the marine mammals to abandon or avoid hunting areas;

(ii) Directly displacing subsistence users; or

(iii) Placing physical barriers between the marine mammals and the subsistence hunters; and

(2) That cannot be sufficiently mitigated by other measures to increase the availability of marine mammals to allow subsistence needs to be met. (50 CFR 216.103).

The primary concern is the disturbance of marine mammals through the introduction of anthropogenic sound into the marine environment during the proposed Test Pile Program. Marine mammals could be behaviorally harassed and either become more difficult to hunt or temporarily abandon traditional hunting grounds. However, the proposed Test Pile Program will not have any impacts to beluga harvests as none currently occur in Cook Inlet. Additionally, subsistence harvests of other marine mammal species in the proposed project area are limited.

Endangered Species Act (ESA)

The Beluga whale is a marine mammal species listed as endangered under the ESA with confirmed or possible occurrence in the study area. NMFS' Permits and Conservation Division has initiated consultation with NMFS' Protected Resources Division under section 7 of the ESA on the issuance of an IHA to POA under section 101(a)(5)(D) of the MMPA for this activity. Consultation will be concluded prior to a determination on the issuance of an IHA.

National Environmental Policy Act (NEPA)

NMFS is also preparing an Environmental Assessment (EA) in accordance with the National Environmental Policy Act (NEPA) and will consider comments submitted in response to this notice as part of that process. The EA will be posted at *http://www.nmfs.noaa.gov/pr/permits/incidental/construction.htm* once it is finalized.

Proposed Authorization

As a result of these preliminary determinations, NMFS proposes to issue an IHA to POA for the POA Test Pile Program in Anchorage, Alaska, provided the previously mentioned mitigation, monitoring, and reporting requirements are incorporated. The proposed IHA language is provided next.

1. This Incidental Harassment Authorization (IHA) is valid from April 1, 2016 through March 31, 2017.

2. This Authorization is valid only for in-water construction work associated with the POA Test Pile Program in Anchorage, Alaska.

3. General Conditions

(a) A copy of this IHA must be in the possession of POA, its designees, and work crew personnel operating under the authority of this IHA.

(b) The species authorized for taking are Steller sea lion (*Eumatopius jubatus*), harbor seal (*Phoca vitulina*), harbor porpoise (*Phocoena phocoena*), killer whale (*Orcinus orca*), and beluga whale (*Delphinapterus Leucas*)

(c) The taking, by Level B harassment only, is limited to the species listed in condition 3(b).

(d) The taking by injury (Level A harassment), serious injury, or death of any of the species listed in condition 3(b) of the Authorization or any taking of any other species of marine mammal is prohibited and may result in the modification, suspension, or revocation of this IHA.

(e) POA shall conduct briefings between construction supervisors and crews, marine mammal monitoring team, and staff prior to the start of all in-water pile driving, and when new personnel join the work, in order to explain responsibilities, communication procedures, marine mammal monitoring protocol, and operational procedures.

4. Mitigation Measures

The holder of this Authorization is required to implement the following mitigation measures:

(a) Time Restriction: For all in-water pile driving activities, POA shall operate only during daylight hours.

(b) Pile Driving Weather Delays: Pile driving shall only take place when the 100 m shutdown zone cannot be can be adequately monitored.

(c) Establishment of Level A and B Harassment (ZOI)

(i) For all pile driving, POA shall implement a minimum shutdown zone of 100 m radius around the pile. If a marine mammal comes within or approaches the shutdown zone, such operations will cease. See Table 5 for minimum radial distances required for Level A and Level B disturbance zones.

(d) Shutdown for Large Groups of Beluga Whales.

(i) In-water pile driving operations shall be shut down if a group of five or more beluga whales is sighted approaching the Level B harassment 160 dB and 125 dB isopleths. If the group is not re-sighted within 20 minutes, pile driving shall resume.

(e) Shutdown for Beluga Whale Calves.

(i) If a calf is sighted approaching a harassment zone, in-water pile driving shall cease and shall not be resumed until the calf is confirmed to be out of the harassment zone and on a path away from the pile driving. If a calf is not re-sighted within 20 minutes, pile driving shall resume.

(f) Use of Soft-start

(i) The project shall utilize soft start techniques for both impact and vibratory pile driving. POA shall initiate sound from vibratory hammers for fifteen seconds at reduced energy followed by a 1-minute waiting period, with the procedure repeated two additional times. For impact driving, POA shall conduct an initial set of three strikes from the impact hammer at 40 percent energy, followed by a 1-minute waiting period, then two subsequent three strike sets. Soft start shall be required at the beginning of each day's pile driving work and at any time following a cessation of pile driving of twenty minutes or longer (specific to either vibratory or impact driving).

(ii) Whenever there has been downtime of 20 minutes or more without vibratory or impact driving, the contractor shall initiate the driving with soft-start procedures described above.

(g) Standard mitigation measures

(i) For in-water heavy machinery work other than pile driving (using, *e.g.,* standard barges, tug boats), if a marine mammal comes within 10 m, operations shall cease and vessels shall reduce speed to the minimum level required to maintain steerage and safe working conditions.

(h) Visual Marine Mammal Monitoring and Observation

(i) Four MMOs shall work concurrently in rotating shifts to provide full coverage for marine mammal monitoring during in-water pile installation activities for the Test Pile Program. One MMO shall observe the Level A zone and two MMS shall scan the Level B zone. Four MMOs shall rotate through these three active positions every 30 minutes. The fourth MMO shall record data.

(ii) Before the Test Pile Program commences, MMOs and POA authorities shall meet to determine the most appropriate observation platform(s) for monitoring during pile driving.

(iii) MMOs shall begin observing for marine mammals within the Level A and Level B harassment zones for 20 minutes before in-water pile driving begins. If a marine mammal(s) is present within the 100-meter shutdown zone prior to pile driving or during the ''soft start'' the start of pile driving shall be delayed until the animal(s) leaves the 100-meter shutdown zone. Pile driving shall resume only after the MMOs have determined, through sighting or by waiting 20 minutes, that the animal(s) has moved outside the 100-meter shutdown zone.

(iv) If a marine mammal is traveling along a trajectory that could take it into the Level B harassment zone, the MMO

shall record the marine mammal(s) as a ''take'' upon entering the Level B harassment zone. While the animal remains within the Level B harassment zone, that pile segment shall be completed without cessation, unless the animal approaches the 100-meter shutdown zone, at which point the MMO shall authorize the immediate shutdown of in-water pile driving before the marine mammal enters the 100-meter shutdown zone. Pile driving shall resume only once the animal has left the 100-meter shutdown zone on its own or has not been resighted for a period of 20 minutes.

(v) MMOs shall be placed on one of the vessels used for hydroacoustic monitoring, which will be stationed offshore.

(vi) The individuals shall scan the waters within each monitoring zone activity using binoculars (25x or equivalent), hand held binoculars (7x) and visual observation.

(vii) The waters shall be scanned 20 minutes prior to commencing pile driving at the beginning of each day, and prior to commencing pile driving after any stoppage of 20 minutes or greater. If marine mammals enter or are observed within the designated marine mammal buffer zone (the 100m radius) during or 20 minutes prior to impact pile driving, the monitors will notify the on-site construction manager to not begin until the animal has moved outside the designated radius.

(viii) The waters shall continue to be scanned for at least 20 minutes after pile driving has completed each day.

5. Monitoring and Reporting

The holder of this Authorization is required to submit a draft report on all monitoring conducted under the IHA 90 calendar days after the completion of the marine mammal monitoring or 60 days prior to the issuance of a subsequent authorization, whichever comes first. A final report shall be prepared and submitted within thirty days following resolution of comments on the draft report from NMFS. This report must contain the informational elements described in the Monitoring Plan, at minimum (see attached), and shall also include:

(a) Acoustic Monitoring

(i) POA conduct acoustic monitoring for representative scenarios of pile driving activity, as described in the Monitoring Plan.

(b) Data Collection

(i) For all marine mammal and acoustic monitoring, information shall be recorded as described in the Monitoring Plan.

(c) Reporting Measures

(i) In the unanticipated event that the specified activity clearly causes the take of a marine mammal in a manner prohibited by the IHA, such as an injury (Level A harassment), serious injury or mortality (*e.g.,* ship-strike, gear interaction, and/or entanglement), POA shall immediately cease the specified activities and immediately report the incident to the Chief of the Permits and Conservation Division, Office of Protected Resources, NMFS, and the Alaska Regional Stranding Coordinators. The report would include the following information:

1. Time, date, and location (latitude/longitude) of the incident;

2. Name and type of vessel involved;

3. Vessel's speed during and leading up to the incident;

4. Description of the incident;

5. Status of all sound source use in the 24 hours preceding the incident;

6. Water depth;

7. Environmental conditions (*e.g.,* wind speed and direction, Beaufort sea state, cloud cover, and visibility);

8. Description of all marine mammal observations in the 24 hours preceding the incident;

9. Species identification or description of the animal(s) involved;

10. Fate of the animal(s); and

11. Photographs or video footage of the animal(s) (if equipment is available).

(ii) Activities would not resume until NMFS is able to review the circumstances of the prohibited take. NMFS shall work with POA to determine what is necessary to minimize the likelihood of further prohibited take and ensure MMPA compliance. POA would not be able to resume their activities until notified by NMFS via letter, email, or telephone.

(iii) In the event that POA discovers an injured or dead marine mammal, and the lead MMO determines that the cause of the injury or death is unknown and the death is relatively recent (*i.e.,* in less than a moderate state of decomposition as described in the next paragraph), POA shall immediately report the incident to the Chief of the Permits and Conservation Division, Office of Protected Resources, NMFS, and the NMFS Alaska Stranding Hotline and/or by email to the Alaska Regional Stranding Coordinators. The report shall include the same information identified in the paragraph above. Activities would be able to continue while NMFS reviews the circumstances of the incident. NMFS would work with POA to determine whether modifications in the activities are appropriate.

(iv) In the event that POA discovers an injured or dead marine mammal, and the lead MMO determines that the injury or death is not associated with or related to the activities authorized in the IHA (*e.g.,* previously wounded animal, carcass with moderate to advanced decomposition, or scavenger damage), POA shall report the incident to the Chief of the Permits and Conservation Division, Office of Protected Resources, NMFS, and the NMFS Alaska Stranding Hotline and/or by email to the Alaska Regional Stranding Coordinators, within 24 hours of the discovery. POA would provide photographs or video footage (if available) or other documentation of the stranded animal sighting to NMFS and the Marine Mammal Stranding Network.

6. This Authorization may be modified, suspended or withdrawn if the holder fails to abide by the conditions prescribed herein, or if NMFS determines the authorized taking is having more than a negligible impact on the species or stock of affected marine mammals.

Request for Public Comments

NMFS requests comment on our analysis, the draft authorization, and any other aspect of the Notice of Proposed IHA for POA's proposed Test Pile Program in Anchorage, Alaska. Please include with your comments any supporting data or literature citations to help inform our final decision on POA's request for an MMPA authorization.

Dated: December 11, 2015.

Perry Gayaldo,

Deputy Director, Office of Protected Resources, National Marine Fisheries Service.

[FR Doc. 2015–31620 Filed 12–15–15; 8:45 am]

BILLING CODE 3510–22–P

DEPARTMENT OF COMMERCE

Patent and Trademark Office

Submission for OMB Review; Comment Request; ''International Work Sharing''

The United States Patent and Trademark Office (USTPO) will submit to the Office of Management and Budget (OMB) for clearance the following proposal for collection of information under the provisions of the Paperwork Reduction Act (44 U.S.C. Chapter 35).

Agency: United States Patent and Trademark Office (USPTO).

Title: International Work Sharing.

OMB Control Number: 0651–0079.

Form Number(s):

- PTO/SB/437JP
- PTO/SB/437KR
- PTO/SB/CSP Survey 1

Type of Request: Regular.

Number of Respondents: 900.

Average Hours per Response: The USPTO estimates that it will take the

public between 5 minutes (.08 hours) and 3 hours, depending upon the complexity of the situation, to gather the necessary information, prepare for submission, and submit a single item in this collection.

Burden Hours: 1533.33.

Cost Burden: $0.

Needs and Uses: This information collection is necessary so that applicants that file applications with the USPTO, Japan Patent Office, and Korean Intellectual Property Office may participate in the International Work Sharing Program. The Program enables its participants to engage in the exchange of IP documents between the patent offices of the United States, Japan, and Korea in order to facilitate efficient worldwide patent examinations.

Affected Public: Individuals or households; businesses or other for-profits; and not-for-profit institutions.

Frequency: On occasion.

Respondent's Obligation: Voluntary.

OMB Desk Officer: Nicholas A. Fraser, email: *Nicholas_A._Fraser@omb.eop.gov.*

Once submitted, the request will be publicly available in electronic format through reginfo.gov. Follow the instructions to view Department of Commerce collections currently under review by OMB.

Further information can be obtained by:

• Email: *InformationCollection@uspto.gov.* Include ''0651–0079 copy request'' in the subject line of the message.

• Mail: Marcie Lovett, Records Management Division Director, Office of the Chief Information Officer, United States Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313–1450.

Written comments and recommendations for the proposed information collection should be sent on or before January 15, 2016 to Nicholas A. Fraser, OMB Desk Officer, via email to *Nicholas_A._Fraser@omb.eop.gov,* or by fax to 202–395–5167, marked to the attention of Nicholas A. Fraser.

Marcie Lovett,

Records Management Division Director, USPTO, Office of the Chief Information Officer.

[FR Doc. 2015–31585 Filed 12–15–15; 8:45 am]

BILLING CODE 3510–16–P

DEPARTMENT OF COMMERCE

United States Patent and Trademark Office

Submission for OMB Review; Comment Request; Patents External Quality Survey

The United States Patent and Trademark Office (USPTO) will submit to the Office of Management and Budget (OMB) for clearance the following proposal for collection of information under the provisions of the Paperwork Reduction Act (44 U.S.C. Chapter 35).

Agency: United States Patent and Trademark Office (USPTO).

Title: Patents External Quality Survey.

OMB Control Number: 0651–0057.

Form Number(s):

• No forms associated

Type of Request: Regular.

Number of Respondents: 3,100.

Average Minutes per Response: The USPTO estimates that it will take the public 10 minutes (.17 hours) to gather the necessary information, prepare for submission, and submit a single item in this collection.

Burden Hours: 516.67.

Cost Burden: $0.

Needs and Uses: Individuals who work at firms that file more than six patent applications a year use the Patents External Quality Survey to provide their perceptions of examination quality to the USPTO. The USPTO uses the feedback gathered from the survey to assist them in targeting key areas for examination quality improvement and to identify important areas for examiner training.

Affected Public: Individuals or households; businesses or other for-profits; and not-for-profit institutions.

Frequency: Semi-annually.

Respondent's Obligation: Voluntary.

OMB Desk Officer: Nicholas A. Fraser, email: *Nicholas_A._Fraser@omb.eop.gov.* Once submitted, the request will be publicly available in electronic format through reginfo.gov. Follow the instructions to view Department of Commerce collections currently under review by OMB.

Further information can be obtained by:

• Email: *InformationCollection@uspto.gov.* Include ''0651–0057 copy request'' in the subject line of the message.

• Mail: Marcie Lovett, Records Management Division Director, Office of the Chief Information Officer, United States Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313–1450.

Written comments and recommendations for the proposed information collection should be sent on or before January 15, 2016 to Nicholas A. Fraser, OMB Desk Officer, via email to *Nicholas_A._Fraser@omb.eop.gov,* or by fax to 202–395–5167, marked to the attention of Nicholas A. Fraser.

Marcie Lovett,

Records Management Division Director, USPTO, Office of the Chief Information Officer.

[FR Doc. 2015–31586 Filed 12–15–15; 8:45 am]

BILLING CODE 3510–16–P

DEPARTMENT OF DEFENSE

Department of the Army

[Docket ID USA–2015–HQ–0037]

Submission for OMB Review; Comment Request

ACTION: Notice.

SUMMARY: The Department of Defense has submitted to OMB for clearance, the following proposal for collection of information under the provisions of the Paperwork Reduction Act.

DATES: Consideration will be given to all comments received by January 15, 2016.

FOR FURTHER INFORMATION CONTACT: Fred Licari, 571–372–0493.

SUPPLEMENTARY INFORMATION:

Title, Associated Form and OMB Number: Army Sex Offender Information; Department of the Army Form 3975; OMB Control Number 0702–0128.

Type of Request: Reinstatement.

Number of Respondents: 550.

Responses per Respondent: 1.

Annual Responses: 550.

Average Burden per Response: 20 minutes.

Annual Burden Hours: 183.

Needs and Uses: The information collection requirement is necessary to obtain and record the sex offender registration information of those sex offenders who live, work or go to school on Army installations. Respondents are any convicted sex offender required to register pursuant to any DoD, Army, State government, law, regulation, or policy where they are employed, reside, or are a student. The information collected is used by Army law enforcement to ensure the sex offender is compliant with any court order restrictions.

Affected Public: Business or other for-profit; individuals or households.

Frequency: On occasion.

Respondent's Obligation: Required to obtain or retain benefits.

OMB Desk Officer: Ms. Jasmeet Seehra.

Comments and recommendations on the proposed information collection should be emailed to Ms. Jasmeet Seehra, DoD Desk Officer, at *Oira_submission@omb.eop.gov.* Please identify the proposed information collection by DoD Desk Officer and the Docket ID number and title of the information collection.

You may also submit comments and recommendations, identified by Docket ID number and title, by the following method:

• *Federal eRulemaking Portal: http://www.regulations.gov.* Follow the instructions for submitting comments.

Instructions: All submissions received must include the agency name, Docket ID number and title for this **Federal Register** document. The general policy for comments and other submissions from members of the public is to make these submissions available for public viewing on the Internet at *http://www.regulations.gov* as they are received without change, including any personal identifiers or contact information.

DOD Clearance Officer: Mr. Frederick Licari.

Written requests for copies of the information collection proposal should be sent to Mr. Licari at WHS/ESD Directives Division, 4800 Mark Center Drive, East Tower, Suite 02G09, Alexandria, VA 22350–3100.

Dated: December 10, 2015.

Aaron Siegel,

Alternate OSD Federal Register Liaison Officer, Department of Defense.

[FR Doc. 2015–31531 Filed 12–15–15; 8:45 am]

BILLING CODE 5001–06–P

DEPARTMENT OF DEFENSE

Department of the Army, Corps of Engineers

Guidelines for Carrying Out Section 221(a)(4) of the Flood Control Act of 1970, as Amended

AGENCY: United States Army Corps of Engineers, Department of Defense.

ACTION: Notice.

SUMMARY: The U.S. Army Corps of Engineers (Corps) has updated the existing guidance for providing in-kind credit under Section 221(a)(4) of the Flood Control Act of 1970, as further amended by Section 1018 of the Water Resources Reform and Development Act of 2014.

DATES: *Effective date:* December 16, 2015.

ADDRESSES: U.S. Army Corps of Engineers, 441 G Street NW., Washington, DC 20314–1000.

FOR FURTHER INFORMATION CONTACT: Janice E. Rasgus, Planning and Policy Division, Washington, DC at 202–761–7674.

SUPPLEMENTARY INFORMATION: ER 1165–2–208 will be posted on the Corps Web site in the very near future.

Response to Comments

The draft ER was published in the August 28, 2015, issue of the **Federal Register** (80 FR 52258) for a 30-day comment period. The comment period was extended by 30 days (see 50 FR 60135). The regulations.gov docket number is COE–2015–0013. Sixteen comments were received.

In response to one commenter, the guidance was expanded to clarify that in-kind contributions can be provided once the feasibility cost sharing agreement is executed and the project management plan is developed.

Several commenters noted that the non-Federal sponsor's costs of Coordination Team participation and audits are no longer considered in-kind contributions that are included as a study or project cost subject to cost sharing. The guidance was expanded to clarify that likewise the Federal Government's cost of Coordination Team participation and audits are not included in study or project costs for cost sharing purposes although these costs are included in calculating any limit on Federal participation.

One commenter requested that the guidance be modified to allow the value of in-kind contributions to be accepted as cash payments toward the additional 10 percent payment required for navigation projects. This request cannot be accommodated. The law is explicit that credit for in-kind contributions shall not alter any requirement for the non-Federal sponsor to pay 5 percent cash for flood damage reduction project and pay the additional 10 percent cash for navigation projects. This requirement was also specified in the in-kind contribution authority as enacted in WRDA 2007 and identified in the implementing guidance for that earlier provision.

Additional minor, non-substantive, edits were made to provide further clarity.

Dated: December 10, 2015.

Theodore A. Brown,

Chief, Planning and Policy Division, Directorate of Civil Works.

ER 1165–2–208

1. *Purpose.* This regulation provides guidance on the implementation of the in-kind contribution credit provisions of Section 221(a)(4) of the Flood Control Act of 1970, as further amended by Section 1018 of the Water Resources Reform and Development Act of 2014 (WRRDA 2014) (42 U.S.C. 1962d–5b(a)(4)) (hereinafter referred to as ''Section 221''). Section 221(a)(4) of the Flood Control Act of 1970, as amended, and Section 1018 of WRRDA 2014 are provided in Appendix A.

2. *Distribution Statement.* Approved for public release. Distribution is unlimited.

3. *Applicability.* This regulation applies to all HQUSACE elements, Major Subordinate Commands (MSCs), and district commands having Civil Works responsibility and is effective immediately.

a. The Section 221 crediting provisions apply to the study, design, and construction of water resources development projects authorized in the Water Resources Development Act (WRDA) of 1986 or later laws, including projects initiated after November 16, 1986 without specific authorization in law. In addition, the crediting provisions apply to the correction of design deficiencies for projects authorized prior to WRDA of 1986. Finally, these provisions are also applicable to a project under an environmental infrastructure assistance program.

(1) For a project with a project partnership agreement (PPA) that was executed on or after November 8, 2007, such PPA may be amended to include work by the non-Federal sponsor that has not yet been initiated for credit toward any remaining non-Federal cost share under that agreement.

(2) Furthermore, in general, the crediting provisions of Section 221 will be used in lieu of Section 104 of WRDA 1986 and Section 215 of the Flood Control Act of 1968. However, any eligibility for credit under Section 104 of WRDA 1986 that was approved previously by the Secretary will be honored.

b. The authority for credit under Section 221 is in addition to any other authority to provide credit for in-kind contributions. Section 221 credit may be applied in lieu of other crediting provisions if requested by the non-Federal sponsor.

This regulation supersedes ER 1165–2–208 dated 17 February 2012.

4. *Key Principles.*

a. *In General.* Section 221 is a comprehensive authority that addresses the affording of credit for the value of in-kind contributions provided by a non-Federal sponsor toward its required cost share (excluding the required 5 percent cash for structural flood damage reduction projects and the additional 10 percent cash payment over 30 years for navigation projects) if those in-kind contributions are determined to be integral to a study or project.

b. *Types of In-Kind Contributions.* The types of in-kind contributions eligible for credit include planning activities (including data collection and other services needed for a feasibility study); design related to construction; and construction (including management; mitigation; and construction materials and services).

c. *Compliance with Applicable Federal Laws, Regulations, and Policies.* Eligibility for credit is subject to the non-Federal sponsor complying with all applicable Federal laws and implementing regulations, including, but not limited to Section 601 of the Civil Rights Act of 1964, as amended (42 U.S.C. 2000d), and Department of Defense Directive 5500.11 issued pursuant thereto; the Age Discrimination Act of 1975 (42 U.S.C. 6102); the Rehabilitation Act of 1973, as amended (29 U.S.C. 794), and Army Regulation 600–7 issued pursuant thereto; and 40 U.S.C. 3141–3148 and 40 U.S.C. 3701–3708 (labor standards originally enacted as the Davis-Bacon Act, the Contract Work Hours and Safety Standards Act, the Copeland Anti-Kickback Act); and the National Environmental Policy Act (42 U.S.C. 4321–4347) and other environmental laws and regulations.

d. *In-Kind Memorandum of Understanding (MOU).*

(1) Construction. Section 221 provides that any construction work that has not been carried out as of November 8, 2007 is eligible for credit only if the non-Federal sponsor executes an agreement with the Secretary prior to carrying out such work. For purposes of Section 221 crediting only, ''carrying out'' construction work means initiation of construction using the non-Federal sponsor's labor force or issuance of the notice to proceed for such construction if undertaken by contract. Therefore, in those cases where there is not yet an executed PPA, the non-Federal sponsor must execute an in-kind MOU with the Corps of Engineers prior to initiating construction or issuing the notice to proceed. Design work associated with that construction is eligible for credit as long as an in-kind MOU or PPA is executed prior to the construction being carried out. In addition, the construction carried out by the non-Federal sponsor is not considered as part of the future without project condition.

(a) Projects Specifically Authorized. For projects that are or will be specifically authorized for construction, an In-Kind MOU for construction may be executed once there is vertical team concurrence with the Tentatively Selected Plan (TSP) at the TSP Milestone. The TSP Milestone is the point at which there is vertical team concurrence on the plan that will be released in the draft study report for public and agency review. Given the new SMART Planning Process, the TSP Milestone should occur much earlier in the planning process than what was previously achieved. Requests from non-Federal sponsors to execute an in-kind MOU for construction prior to the TSP Milestone will be considered on a case-by-case basis and must be approved by the Assistant Secretary of the Army (Civil Works). Since each project presents its own unique combination of circumstances, each request will require an individual evaluation that will include consideration of, but not limited to, the following criteria:

(i) Whether the proposed work is a modification of an existing Federal project;

(ii) Whether the proposed work will follow an existing levee alignment in the case of a flood risk management project;

(iii) Whether the proposed work balances and integrates the wise use of the flood plain to ensure public safety;

(iv) Whether the proposed work significantly reduces flood damage risk to human life, property or critical infrastructure; and

(iv) Whether the proposed work will likely be included in the final project recommendation.

(b) Continuing Authority Program. For projects implemented under the Continuing Authority Program or a regional authority that does not require additional authorization to implement the project, an In-Kind MOU for design and implementation may be executed after the MSC Commander approves the decision document for the project.

(2) Design. For projects that are or will be specifically authorized for construction, an In-Kind MOU for design may be executed after the TSP Milestone.

(3) Planning.

(a) Projects Specifically Authorized. For projects that are or will be specifically authorized for construction, Section 1002 of WRRDA 2014 eliminated the full Federal reconnaissance phase that used to be undertaken prior to execution of a feasibility cost sharing agreement (FCSA). In the past, a project management plan (PMP), which established the scope of the planning, including activities needed to carry out the study, was developed during this reconnaissance phase. Under the new single phase study process mandated by WRRDA 2014, the project management plan will not be developed until after execution of FCSA. As the PMP, including a determination of the scope of the study, will not be developed until after execution of the FCSA, no In-Kind MOU for planning is permitted. Following execution of the FCSA and development of the PMP, the provision of in-kind contributions is allowed under the FCSA.

(b) Continuing Authority Program. For projects implemented under the Continuing Authority Program or a regional authority that does not require additional authorization to implement the project, sections 905(c) and 105(a)(3) of WRDA 1986, as amended, provide that the first $100,000 of these studies is a Federal expense. Therefore, once a PMP has been developed and the MSC Commander has approved initiation of the feasibility study, an In-Kind MOU for planning may be executed.

(4) Any work undertaken by a non-Federal sponsor pursuant to an In-Kind MOU is at its own risk and responsibility. An In-Kind MOU provides no assurance that the non-Federal sponsor's work will be determined to be integral to the Federal project or that any construction undertaken by the non-Federal sponsor will be included as part of any ultimately recommended Federal project. Execution of an In-Kind MOU in no way obligates the Corps to enter into any future agreement for the project.

(5) In general, once a FCSA, design agreement, or PPA is executed, further use of In-Kind MOUs is not appropriate for inclusion of additional in-kind contributions under that FCSA, design agreement, or PPA, respectively. Special circumstances requiring expedited review and execution of an amendment to an executed agreement should be coordinated with the HQUSACE RIT.

(6) MSC Commanders may approve a District Engineer's execution of Model In-Kind MOUs for Construction or for Design, provided that the In-Kind MOUs do not include any deviations. Any

proposed deviations must be submitted to HQUSACE for approval prior to execution. Models for the In-Kind MOU for construction, including design work, and for design work only are available at *http://www.usace.army.mil/Missions/CivilWorks/ProjectPartnershipAgreements/model_other.aspx*.

e. *Integral Determinations.*

(1) Section 221 provides that credit may be afforded only if the Secretary determines that the material or service provided as an in-kind contribution by a non-Federal sponsor is integral to the study or project.[1] To be integral to the study or project, the material or service must be part of the work that the Federal Government would otherwise have undertaken for the study or for construction of what is ultimately determined to be the Federal project. See Appendix B for additional guidance on criteria and procedures for processing integral determinations.

(2) The approval of integral determinations is delegated to the MSC Commander. The approval authority delegated to the MSC Commander is subject to the full compliance of each integral determination to law and policy and may not be further delegated within the MSC or to the District Commander. A separate integral determination is not required for planning activities included in the PMP, approved by the MSC Commander, as required for the study effort.

f. *Determining the Amount of Credit.*

(1) The amount of in-kind contributions that may be eligible for inclusion in shared costs for cost sharing purposes under the applicable cost sharing agreement will be subject to an audit by the Government to determine the reasonableness, allocability, and allowability of such amount.

(2) The creditable amount is the lesser of the costs incurred by the non-Federal sponsor to obtain such materials or services; the market value of such materials or services as of the date that the non-Federal sponsor provides such materials or services for use in the study or project; or the Government's estimate of the cost for such work if it had been accomplished by the Government. This amount is not subject to interest charges or to adjustment to reflect changes in price levels between the time the in-kind contributions were completed and the time the amount is credited.

(3) Any in-kind contributions performed or paid for by the non-Federal sponsor using funds provided by another Federal agency (as well as any non-Federal matching share or contribution that was required by such Federal agency for such program or grant) are not eligible for credit unless the Federal agency providing the Federal portion of such funds verifies in writing that the funds are authorized to be used to carry out the study or project.

(4) After execution of the applicable FCSA, Design Agreement (DA), or PPA, the non-Federal sponsor will submit to the Government (not less frequently than every 6 months or as provided in the agreement) credit request(s) for eligible in-kind contributions under that agreement. The credit requests will contain the following: written certification by the non-Federal sponsor of the payments made to contractors, suppliers, or employees for in-kind contributions; copies of all relevant invoices and evidence of such payments; written identification of costs that have been paid with funds or grants provided by a Federal agency as well as any non-Federal matching share or contribution that was required by such Federal agency for such program or grant; and a written request for credit of a specific amount not in excess of such specified payments. Failure to provide sufficient documentation supporting the credit request will result in a denial of credit in accordance with the terms of the applicable cost sharing agreement.

(5) In-kind contributions are subject to a review (for feasibility level and design activities) or on-site inspection (construction), as applicable, and certification by the Government that the work was accomplished in a satisfactory manner and in accordance with applicable Federal laws, regulations, and policies. The Government will not include in the costs to be shared under the applicable cost sharing agreement or afford credit for any work the Government determines was not accomplished in a satisfactory manner or in accordance with applicable Federal laws, regulations, and policies.

(6) In general, the amount of credit for in-kind contributions that can be afforded under a FCSA or a PPA is limited to the amount of the non-Federal sponsor's cost share under that agreement. As the costs of design under a DA are included in total project costs under a PPA, credit for in-kind contributions under a DA is carried over to the PPA, and the maximum amount of credit for in-kind contributions under a PPA is limited to the non-Federal sponsor's required cost share under the PPA. Credit for in-kind contributions may not be afforded toward the required 5 percent cash payment for structural flood damage reduction projects or the additional 10 percent cash payment for navigation projects.

(7) Credit for in-kind contributions for planning is limited to credit that can be afforded under a specific FCSA. In other words, excess credit may not be carried over to design or construction of the project. Credit for planning work by the non-Federal sponsor is limited to its 50 percent of planning costs and will be done in accordance with the PMP, under the terms and conditions in the FCSA.

(8) Credit for in-kind contributions provided by a non-Federal sponsor for the construction of a project, or separable element thereof, that are in excess of the non-Federal cost share for an authorized separable element of a project may be applied toward the non-federal cost share for a different authorized separable element of the same project. Additional Federal appropriations will be required to offset the application of any excess credit to another separable element.

(9) If the value of eligible in-kind contributions exceeds the amount of credit that can be afforded pursuant to the provisions of a PPA (*i.e.,* exceeds the required non-Federal cost share for all features covered by that PPA), only the amount of credit afforded should be included in total project costs. Recalculation of total project costs will be required to exclude from total project costs the value of in-kind contributions that exceed the amount of credit that can be afforded. In addition, the amount excluded will not be considered part of total costs for the purposes of Section 902 of WRDA 1986 calculations.

(10) No reimbursements are authorized for in-kind contributions under Section 221 except as provided in paragraph 4 g., below.

g. *Lands, Easements, Relocations, Rights-of-Way, and Areas for Disposal of Dredged Material (LERRDs).* Section 221 does not alter any other requirement for the non-Federal sponsor to provide LERRDs for a project, and the non-Federal sponsor should coordinate with the District to ensure that appropriate real estate interests for the project are acquired. Any LERRDs associated with in-kind contributions determined to be integral to the project will be credited to the project as LERRDs except the LERRs

[1] The non-Federal Sponsor's costs of Coordination Team participation and audits are not in-kind contributions and are not included in ''shared costs'' for cost sharing purposes. Likewise, the Federal Government's cost of Coordination Team participation and audits are not included in ''shared costs'' for cost sharing purposes although these costs are included in calculating any limit on Federal participation. The costs of the non-Federal Sponsor's performance of investigations for hazardous substances are eligible for inclusion as a shared costs and for credit as an in-kind contribution and do not require a separate integral determination.

needed for fish and wildlife mitigation. (The costs of LERRs needed for fish and wildlife mitigation are assigned to the project purpose(s) causing the need for such mitigation and are subject to construction cost sharing established for that project purpose.) In addition, for a navigation project, LERRs are creditable only toward the requirement for the non-Federal sponsor to pay an additional 10 percent of the cost of the general navigation features.

(1) Previously, credit for in-kind contributions was afforded only toward the non-Federal sponsor's required cash contribution after consideration of the value of LERRDs provided by the non-Federal sponsor. WRRDA 2014 changes how credit for in-kind contributions is calculated. For projects other than navigation projects, to the extent that credit for LERRDs combined with credit for the value of in-kind contributions exceed the non-Federal share of the cost of a project, WRRDA 2014 provides that the Secretary, subject to the availability of funds, shall enter into a separate reimbursement agreement to reimburse the non-Federal sponsor for the difference between creditable LERRDs and in-kind contributions and the non-Federal cost share. Therefore, at the final accounting for the project, to the extent funds for the project remain available, the Secretary shall execute an agreement with the non-Federal sponsor for reimbursement of the difference.

(2) If funds remaining on a project are insufficient to provide full reimbursement under paragraph g.(1), the non-Federal sponsor may request reimbursement. The Secretary shall prioritize such requests, and enter into reimbursements agreements, in the order the requests were received, as funds become available for reimbursements.

5. *Design.* Design by the non-Federal sponsor must be performed in accordance with the requirements in ER 1110–2–1150, reviewed in accordance with ER 1110–1–12, and subject to the applicable peer review guidance. In accordance with section 105(c) of WRDA 1986, the costs of design shall be shared in the same percentages as the purposes of such project.

a. If the value of eligible in-kind contributions is less than the non-Federal sponsor's share of design costs, the non-Federal sponsor must contribute sufficient funds to equal its share of total design costs.

b. If the value of eligible in-kind contributions is greater than the non-Federal sponsor's share of total design costs, then no cash payment from the non-Federal sponsor is required. The value of all of the non-Federal sponsor's eligible in-kind contributions (including those in excess of its share of total design costs) will be included in total project costs in the PPA. The maximum amount of credit that may be afforded pursuant to the PPA is limited to the non-Federal sponsor's cost share under that agreement.

6. *Construction.*

a. To be eligible for credit, in-kind contributions prior to execution of the PPA must have been provided or performed after execution of an In-Kind MOU. Credit for in-kind contributions will not be afforded toward the non-Federal sponsor's requirement to provide in cash 5 percent of the costs for structural flood damage reduction projects (either specifically authorized or implemented pursuant to Continuing Authority Program Sections 14, 205, or 208 projects); the non-Federal sponsor's requirement to pay for betterments or any other work performed by the Government on behalf of the non-Federal sponsor; the non-Federal sponsor's requirement to provide lands, easements, rights-of-way, relocations, or improvements to enable the disposal of dredged or excavated material required for the project or separable element of the project; or the non-Federal sponsor's additional payment of 10 percent of the cost of general navigation features for a navigation project.

b. The non-Federal sponsor may not initiate construction following execution of a PPA until the designs, detailed plans and specifications, and arrangements for such work have been approved by the Government. In addition, any proposed changes to approved designs and plans and specifications must be approved by the Government in advance of such construction. Upon completion of construction, the non-Federal sponsor will furnish to the Government a copy of all final as-built drawings.

c. For CAP authorities and regional authorities that are implemented with a single agreement covering design and implementation, if a non-Federal sponsor proposes to provide or perform all or a portion of the design for a project as in-kind contributions, a PPA addressing both design and construction is required.

FOR THE COMMANDER:

Colonel, Corps of Engineers Chief of Staff

Enclosures: 2 Appendices

Appendix A

Section 221(a)(4) of the Flood Control Act of 1970, as Amended (42 U.S.C. 1962d–5b(a)(4))

SEC. 221. WRITTEN AGREEMENT REQUIREMENT FOR WATER RESOURCES PROJECTS.

(a) COOPERATION OF NON-FEDERAL INTEREST.—

(4) Credit for in-kind contributions.

(A) In general. A partnership agreement described in paragraph (1) may provide with respect to a project that the Secretary shall credit toward the non-Federal share of the cost of the project, including a project implemented without specific authorization in law or a project under an environmental infrastructure assistance program, the value of in-kind contributions made by the non-Federal interest, including—

(i) the costs of planning (including data collection), design, management, mitigation, construction, and construction services that are provided by the non-Federal interest for implementation of the project;

(ii) the value of materials or services provided before execution of the partnership agreement, including efforts on constructed elements incorporated into the project; and

(iii) the value of materials and services provided after execution of the partnership agreement.

(B) Condition. The Secretary may credit an in-kind contribution under subparagraph (A) only if the Secretary determines that the material or service provided as an in-kind contribution is integral to the project.

(C) Work performed before partnership agreement.

(i) Construction.

(I) In general. In any case in which the non-Federal interest is to receive credit under subparagraph (A) for the cost of construction carried out by the non-Federal interest before execution of a partnership agreement and that construction has not been carried out as of November 8, 2007, the Secretary and the non-Federal interest shall enter into an agreement under which the non-Federal interest shall carry out such work and shall do so prior to the non-Federal interest initiating construction or issuing a written notice to proceed for the construction.

(II) Eligibility. Construction that is carried out after the execution of an agreement to carry out work described in subclause (I) and any design activities that are required for that construction, even if the design activity is carried out prior to the execution of the agreement to carry out work, shall be eligible for credit.

(ii) Planning.

(I) In general. In any case in which the non-Federal interest is to receive credit under subparagraph (A) for the cost of planning carried out by the non-Federal interest before execution of a feasibility cost-sharing agreement, the Secretary and the non-Federal interest shall enter into an agreement under which the non-Federal interest shall carry out such work and shall do so prior to the non-Federal interest initiating that planning.

(II) Eligibility. Planning that is carried out by the non-Federal interest after the

execution of an agreement to carry out work described in subclause (I) shall be eligible for credit.

(D) Limitations. Credit authorized under this paragraph for a project—

(i) shall not exceed the non-Federal share of the cost of the project;

(ii) shall not alter any other requirement that a non-Federal interest provide lands, easements, relocations, rights-of-way, or areas for disposal of dredged material for the project;

(iii) shall not alter any requirement that a non-Federal interest pay a portion of the costs of construction of the project under sections 101(a)(2) and 103(a)(1)(A) of the Water Resources Development Act of 1986 (33 U.S.C. 2211(a)(2); 33 U.S.C. 2213(a)(1)(A)) of the Water Resources Development Act of 1986 (33 U.S.C. 2211; 33 U.S.C. 2213); and

(iv) shall not exceed the actual and reasonable costs of the materials, services, or other things provided by the non-Federal interest, as determined by the Secretary.

(E) Analysis of costs and benefits. In the evaluation of the costs and benefits of a project, the Secretary shall not consider construction carried out by a non-Federal interest under this subsection as part of the future without project condition.

(F) Transfer of credit between separable elements of a project. Credit for in-kind contributions provided by a non-Federal interest that are in excess of the non-Federal cost share for an authorized separable element of a project may be applied toward the non-Federal cost share for a different authorized separable element of the same project.

(G) Application of credit.

(i) In general. To the extent that credit for in-kind contributions, as limited by subparagraph (D), and credit for required land, easements, rights-of-way, dredged material disposal areas, and relocations provided by the non-Federal interest exceed the non-Federal share of the cost of construction of a project other than a navigation project, the Secretary, subject to the availability of funds, shall enter into a reimbursement agreement with the non-Federal interest, which shall be in addition to a partnership agreement under subparagraph (A), to reimburse the difference to the non-Federal interest.

(ii) Priority. If appropriated funds are insufficient to cover the full cost of all requested reimbursement agreements under clause (i), the Secretary shall enter into reimbursement agreements in the order in which requests for such agreements are received.''; and

(H) Applicability.

(i) In general. This paragraph shall apply to water resources projects authorized after November 16, 1986, including projects initiated after November 16, 1986, without specific authorization in law, and to water resources projects authorized prior to the date of enactment of the Water Resources Development Act of 1986 (Pub. L. 99–662) [enacted June 10, 2014], if correction of design deficiencies is necessary.

(ii) Authorization as addition to other authorizations. The authority of the Secretary to provide credit for in-kind contributions pursuant to this paragraph shall be in addition to any other authorization to provide credit for in-kind contributions and shall not be construed as a limitation on such other authorization. The Secretary shall apply the provisions of this paragraph, in lieu of provisions under other crediting authority, only if so requested by the non-Federal interest.

Section 1018 of the Water Resources Reform and Development Act of 2014

Sec. 1018. CREDIT FOR IN-KIND CONTRIBUTIONS.

(a) In General.—Section 221(a)(4) of the Flood Control Act of 1970 (42 U.S.C. 1962d–5b(a)(4)) is amended—

(1) in subparagraph (A), in the matter preceding clause (i), by inserting ''or a project under an environmental infrastructure assistance program'' after ''law'';

(2) in subparagraph (C) by striking ''In any case'' and all that follows through the period at the end and inserting the following:

''(i) CONSTRUCTION.—

''(I) In General.—In any case in which the non-Federal interest is to receive credit under subparagraph (A) for the cost of construction carried out by the non-Federal interest before execution of a partnership agreement and that construction has not been carried out as of November 8, 2007, the Secretary and the non-Federal interest shall enter into an agreement under which the non-Federal interest shall carry out such work and shall do so prior to the non-Federal interest initiating construction or issuing a written notice to proceed for the construction.

''(II) Eligibility.—Construction that is carried out after the execution of an agreement to carry out work described in subclause (I) and any design activities that are required for that construction, even if the design activity is carried out prior to the execution of the agreement to carry out work, shall be eligible for credit.

''(ii) PLANNING.—

''(I) In General.—In any case in which the non-Federal interest is to receive credit under subparagraph (A) for the cost of planning carried out by the non-Federal interest before execution of a feasibility cost-sharing agreement, the Secretary and the non-Federal interest shall enter into an agreement under which the non-Federal interest shall carry out such work and shall do so prior to the non-Federal interest initiating that planning.

''(II) Eligibility.—Planning that is carried out by the non-Federal interest after the execution of an agreement to carry out work described in subclause (I) shall be eligible for credit.'';

(3) in subparagraph (D)(iii) by striking ''sections 101 and 103'' and inserting ''sections 101(a)(2) and 103(a)(1)(A) of the Water Resources Development Act of 1986 (33 U.S.C. 2211(a)(2); 33 U.S.C. 2213(a)(1)(A))'';

(4) by redesignating subparagraph (E) as subparagraph (H);

(5) by inserting after subparagraph (D) the following:

''(E) Analysis of Costs and Benefits.—In the evaluation of the costs and benefits of a project, the Secretary shall not consider construction carried out by a non-Federal interest under this subsection as part of the future without project condition.

''(F) Transfer of Credit Between Separable Elements of a Project.—Credit for in-kind contributions provided by a non-Federal interest that are in excess of the non-Federal cost share for an authorized separable element of a project may be applied toward the non-Federal cost share for a different authorized separable element of the same project.

''(G) APPLICATION OF CREDIT.—

''(i) In General.—To the extent that credit for in-kind contributions, as limited by subparagraph (D), and credit for required land, easements, rights-of-way, dredged material disposal areas, and relocations provided by the non-Federal interest exceed the non-Federal share of the cost of construction of a project other than a navigation project, the Secretary, subject to the availability of funds, shall enter into a reimbursement agreement with the non-Federal interest, which shall be in addition to a partnership agreement under subparagraph (A), to reimburse the difference to the non-Federal interest.

''(ii) Priority.—If appropriated funds are insufficient to cover the full cost of all requested reimbursement agreements under clause (i), the Secretary shall enter into reimbursement agreements in the order in which requests for such agreements are received.''; and

(6) in subparagraph (H) (as redesignated by paragraph (4))—

(A) in clause (i) by inserting '', and to water resources projects authorized prior to the date of enactment of the Water Resources Development Act of 1986 (Public Law 99–662), if correction of design deficiencies is necessary'' before the period at the end; and

(B) by striking clause (ii) and inserting the following:

''(ii) Authorization As Addition to Other Authorizations.—The authority of the Secretary to provide credit for in-kind contributions pursuant to this paragraph shall be in addition to any other authorization to provide credit for in-kind contributions and shall not be construed as a limitation on such other authorization. The Secretary shall apply the provisions of this paragraph, in lieu of provisions under other crediting authority, only if so requested by the non-Federal interest.''.

(b) Applicability.—Section 2003(e) of the Water Resources Development Act of 2007 (42 U.S.C. 1962d–5b note) is amended—

(1) by inserting '', or construction of design deficiency corrections on the project,'' after ''construction on the project''; and

(2) by inserting '', or under which construction of the project has not been completed and the work to be performed by the non-Federal interests has not been carried out and is creditable only toward any remaining non-Federal cost share,'' after ''has not been initiated''.

(c) Effective Date.—The amendments made by subsections (a) and (b) take effect on November 8, 2007.

(d) Guidelines.—

(1) In General.—Not later than 1 year after the date of enactment of this Act, the Secretary shall update any guidance or

regulations for carrying out section 221(a)(4) of the Flood Control Act of 1970 (42 U.S.C. 1962d–5b(a)(4)) (as amended by subsection (a)) that are in existence on the date of enactment of this Act or issue new guidelines, as determined to be appropriate by the Secretary.

(2) Inclusions.—Any guidance, regulations, or guidelines updated or issued under paragraph (1) shall include, at a minimum—

(A) the milestone for executing an in-kind memorandum of understanding for construction by a non-Federal interest;

(B) criteria and procedures for evaluating a request to execute an in-kind memorandum of understanding for construction by a non-Federal interest that is earlier than the milestone under subparagraph (A) for that execution; and

(C) criteria and procedures for determining whether work carried out by a non-Federal interest is integral to a project.

(3) Public and Stakeholder Participation.—Before issuing any new or revised guidance, regulations, or guidelines or any subsequent updates to those documents, the Secretary shall—

(A) consult with affected non-Federal interests;

(B) publish the proposed guidelines developed under this subsection in the **Federal Register**; and

(C) provide the public with an opportunity to comment on the proposed guidelines.

(e) Other Credit.—Nothing in section 221(a)(4) of the Flood Control Act of 1970 (42 U.S.C. 1962d–5b(a)(4)) (as amended by subsection (a)) affects any eligibility for credit under section 104 of the Water Resources Development of 1986 (33 U.S.C. 2214) that was approved by the Secretary prior to the date of enactment of this Act.

Appendix B

Criteria and Procedures for In-Kind Contribution Integral Determinations

B–1. *Determining if In-Kind Contributions Are Integral to the Study/Project.* Establishing and allowing credit is a two-step process whereby: (1) Eligibility for credit is determined based on whether the in-kind contribution is integral to the study or project, and (2) actual affording of credit is accomplished based on an audit of the non-Federal work by the District Engineer under the terms of the FCSA, DA, or PPA, as appropriate. The level of analysis to determine if work is integral to the project is scalable. For instance, work accomplished by the non-Federal sponsor on its own under an In-Kind MOU must be fully analyzed to determine whether it is integral to the project, *i.e.,* work that the Government otherwise would have performed for the project. In general, for work that will be accomplished after execution of a DA or PPA, it will be clearer what work is required for the project and therefore integral to the project; furthermore, the Government will be approving plans and specifications prior to the work being undertaken by the non-Federal sponsor.

a. *Approval Level of Integral Determinations.* Under the terms of Paragraph 4.e. of this regulation, approval of integral determinations is delegated to the MSC Commander. This authority may not be further delegated.

b. *Timing of Integral Determinations.*

(1) In general, the integral determination should be completed immediately prior to review and approval of a DA or PPA, or amendment as applicable, that provides for the affording of credit. The integral determination for planning efforts is accomplished as part of the development of the PMP.

(2) Include at least 30 days in the project schedule for processing at the MSC of the Integral Determinations by the MSC Commander. These times are recommended for scheduling purposes and should be extended if processing identifies significant issues requiring resolution.

c. *Procedures for Processing.*

(1) For a feasibility study, planning activities, including data collection, must be included in the approved Project Management Plan in order for those contributions to be eligible for credit.

(2) The District will prepare an Integral Determination Report (IDR) for design and construction work that includes at a minimum the information contained in the following paragraphs. A suggested format for an IDR can be found at *http://www.usace.army.mil/Missions/CivilWorks/ProjectPartnershipAgreements/model_other.aspx.* The IDR should contain a description of the activities required to perform the design or construction, as applicable, of the Federal project or separable element in sufficient detail to allow a comparison with the description of the proposed in-kind contributions; a detailed description of the work items proposed to be provided or performed as in-kind contributions; a discussion of how each work item proposed to be provided or performed as an in-kind contribution is integral to the project; an estimate of the costs of each work item proposed to be provided or performed as an in-kind contribution; the estimated amount of credit to be afforded for each work item proposed to be provided or performed as an in-kind contribution; and a District Commander recommendation identifying which of the proposed in-kind contributions should be considered integral to the project. If the in-kind contributions were provided or performed prior to execution of the applicable cost sharing agreement, then also include in the IDR the results of the review or inspection, as applicable, and certification by the District Commander on whether the work was accomplished in a satisfactory manner and in accordance with applicable Federal laws, regulations, and policies; and documentation of satisfactory environmental compliance for the construction portion of the in-kind contributions.

(3) The district will submit the IDR to the MSC District Support Team for action. The MSC District Support Team will perform the MSC review of the IDR. The MSC review team also will include members from the MSC Office of Counsel and from the MSC Planning Community of Practice (CoP), MSC Engineering and Construction CoP, MSC Real Estate CoP, and other CoPs, as needed. In addition, if the proposed in-kind contributions consist of design or construction of dams, levees, or bridges, the MSC review team must include the MSC Dam, Levee, or Bridge Safety Officer. After satisfactory resolution of all comments on the IDR and a determination that the IDR complies with all applicable law and policy, the MSC District Support Team shall prepare an Integral Determination memo for approval and signature by the MSC Commander.

(4) The Integral Determination approval memo will state whether the work identified in the IDR, or a portion thereof, has been determined to be integral to the project. In addition, the memo should state that the determination of the actual value of the in-kind contributions and affording credit for such amount will be accomplished by the Government in accordance with the limitations, conditions, and terms of the applicable cost sharing agreement.

B–2. *Considerations in determining whether the work is integral and creditable:* The proposed in-kind contributions consist of work that the Government would have otherwise provided or performed for the project, except for performance of activities that are inherently governmental responsibilities (see paragraph B–3 below). Examples of activities that are acceptable in-kind contributions: Performance of design of all or a portion of the Federal project, including data collection related to design work; demolition of buildings on lands required for the project; performance of design or construction related studies for historic preservation activities except data recovery; performance of cost shared monitoring and adaptive management; and construction of a portion of the project.

a. For proposed in-kind contributions performed prior to execution of the applicable cost sharing agreement, the in-kind contributions have been reviewed or inspected, as applicable, and certified by the Government that the work was accomplished in a satisfactory manner and in accordance with applicable Federal laws, regulations, and policies.

b. For any proposed in-kind contributions proposed to be performed after execution of the PPA, the plans and specifications must be approved by the District Commander prior to initiation of the construction work.

c. For materials provided for use in construction work managed by the Government, the materials must meet the minimum Government requirements for materials and any substitute materials have been determined by the Government to be a functional equivalent in accordance with policies governing contractor substitution of materials.

d. The non-Federal sponsor should coordinate with the District to ensure that appropriate real estate interests to support the in-kind contributions and project are acquired.

B–3. *The following will not be accepted as in-kind contributions:*

a. The proposed in-kind contributions are not part of the Federal project.

b. The proposed in-kind contributions consist of performance of activities that are inherently Governmental responsibilities (*e.g.,* management of Government contracts; performance of District Quality Review,

Agency Technical Review, Independent External Peer Review, or Policy Compliance Review; determining if Value Engineering evaluations are acceptable; determining the LERRD required for the project or separable element of the project; determining the value of LERRD for crediting purposes; or making determinations as to compliance with applicable environmental laws and regulations).

c. The proposed in-kind contributions are features or obligations that are a 100 percent non-Federal sponsor responsibility (*e.g.,* purposes of land reclamation, local drainage, to protect against land or bank erosion, and/or the removal of hazardous, toxic, or radioactive wastes; local service facilities; betterments; acquisition and performance of LERRD, except for the provision of dredged or excavated material disposal facilities for commercial navigation projects; and performance of operation, maintenance, repair, rehabilitation, or replacement (OMRR&R);

d. The proposed in-kind contributions have or will create a hazard to human life or property.

e. The proposed in-kind contributions have been determined to be environmentally unacceptable.

f. For proposed in-kind contributions performed prior to execution of the applicable cost sharing agreement, after review or inspection, as applicable, the Government cannot certify the proposed in-kind contributions were accomplished in a satisfactory manner and in accordance with applicable Federal laws, regulations, and policies.

g. For proposed in-kind contributions performed prior to execution of the applicable cost sharing agreement, the non-Federal sponsor has not performed the necessary OMRR&R, resulting in the work no longer functioning as needed for the project.

[FR Doc. 2015–31654 Filed 12–15–15; 8:45 am]

BILLING CODE 3720–58–P

DEPARTMENT OF EDUCATION

[Docket No. ED–2015–ICCD–0140]

Agency Information Collection Activities; Comment Request; Federal Direct Stafford/Ford Loan and Federal Direct Subsidized/Unsubsidized Stafford/Ford Loan Master Promissory Note

AGENCY: Federal Student Aid (FSA), Department of Education (ED).

ACTION: Notice.

SUMMARY: In accordance with the Paperwork Reduction Act of 1995 (44 U.S.C. chapter 3501 *et seq.*), ED is proposing a revision of an existing information collection.

DATES: Interested persons are invited to submit comments on or before February 16, 2016.

ADDRESSES: To access and review all the documents related to the information collection listed in this notice, please use *http://www.regulations.gov* by searching the Docket ID number ED–2015–ICCD–0140. Comments submitted in response to this notice should be submitted electronically through the Federal eRulemaking Portal at *http://www.regulations.gov* by selecting the Docket ID number or via postal mail, commercial delivery, or hand delivery. Please note that comments submitted by fax or email and those submitted after the comment period will not be accepted. Written requests for information or comments submitted by postal mail or delivery should be addressed to the Director of the Information Collection Clearance Division, U.S. Department of Education, 400 Maryland Avenue SW., LBJ, Room 2E115, Washington, DC 20202–4537.

FOR FURTHER INFORMATION CONTACT: For specific questions related to collection activities, please contact Jon Utz, 202–377–4040.

SUPPLEMENTARY INFORMATION: The Department of Education (ED), in accordance with the Paperwork Reduction Act of 1995 (PRA) (44 U.S.C. 3506(c)(2)(A)), provides the general public and Federal agencies with an opportunity to comment on proposed, revised, and continuing collections of information. This helps the Department assess the impact of its information collection requirements and minimize the public's reporting burden. It also helps the public understand the Department's information collection requirements and provide the requested data in the desired format. ED is soliciting comments on the proposed information collection request (ICR) that is described below. The Department of Education is especially interested in public comment addressing the following issues: (1) Is this collection necessary to the proper functions of the Department; (2) will this information be processed and used in a timely manner; (3) is the estimate of burden accurate; (4) how might the Department enhance the quality, utility, and clarity of the information to be collected; and (5) how might the Department minimize the burden of this collection on the respondents, including through the use of information technology. Please note that written comments received in response to this notice will be considered public records.

Title of Collection: Federal Direct Stafford/Ford Loan and Federal Direct Subsidized/Unsubsidized Stafford/Ford Loan Master Promissory Note.

OMB Control Number: 1845–0007.

Type of Review: A revision of an existing information collection.

Respondents/Affected Public: Individuals or Households.

Total Estimated Number of Annual Responses: 5,027,286.

Total Estimated Number of Annual Burden Hours: 2,513,643.

Abstract: The Federal Direct Stafford/Ford Loan (Direct Subsidized Loan) and Federal Direct Unsubsidized Stafford/Ford Loan (Direct Unsubsidized Loan) Master Promissory Note (MPN) serves as the means by which an individual agrees to repay a Direct Subsidized Loan and/or Direct Unsubsidized Loan. An MPN is a promissory note under which a borrower may receive loans for a single or multiple academic years. This revision incorporates changes to information based on regulatory changes, expands repayment plan information, and clarifies information through updated language.

Dated: December 10, 2015.

Tomakie Washington,

Acting Director, Information Collection Clearance Division, Office of the Chief Privacy Officer, Office of Management.

[FR Doc. 2015–31571 Filed 12–15–15; 8:45 am]

BILLING CODE 4000–01–P

DEPARTMENT OF EDUCATION

[Docket No. ED–2015–ICCD–0141]

Agency Information Collection Activities; Comment Request; William D. Ford Federal Direct Loan (Direct Loan) Program Federal Direct PLUS Loan Master Promissory Note and Endorser Addendum

AGENCY: Federal Student Aid (FSA), Department of Education (ED).

ACTION: Notice.

SUMMARY: In accordance with the Paperwork Reduction Act of 1995 (44 U.S.C. chapter 3501 *et seq.*), ED is proposing a revision of an existing information collection.

DATES: Interested persons are invited to submit comments on or before February 16, 2016.

ADDRESSES: To access and review all the documents related to the information collection listed in this notice, please use *http://www.regulations.gov* by searching the Docket ID number ED–2015–ICCD–0141. Comments submitted in response to this notice should be submitted electronically through the Federal eRulemaking Portal at *http://www.regulations.gov* by selecting the Docket ID number or via postal mail, commercial delivery, or hand delivery. *Please note that comments submitted by fax or email and those submitted after the comment period will not be*

accepted. Written requests for information or comments submitted by postal mail or delivery should be addressed to the Director of the Information Collection Clearance Division, U.S. Department of Education, 400 Maryland Avenue SW., LBJ, Room 2E103, Washington, DC 20202–4537.

FOR FURTHER INFORMATION CONTACT: For specific questions related to collection activities, please contact Jon Utz, 202–377–4040.

SUPPLEMENTARY INFORMATION: The Department of Education (ED), in accordance with the Paperwork Reduction Act of 1995 (PRA) (44 U.S.C. 3506(c)(2)(A)), provides the general public and Federal agencies with an opportunity to comment on proposed, revised, and continuing collections of information. This helps the Department assess the impact of its information collection requirements and minimize the public's reporting burden. It also helps the public understand the Department's information collection requirements and provide the requested data in the desired format. ED is soliciting comments on the proposed information collection request (ICR) that is described below. The Department of Education is especially interested in public comment addressing the following issues: (1) Is this collection necessary to the proper functions of the Department; (2) will this information be processed and used in a timely manner; (3) is the estimate of burden accurate; (4) how might the Department enhance the quality, utility, and clarity of the information to be collected; and (5) how might the Department minimize the burden of this collection on the respondents, including through the use of information technology. Please note that written comments received in response to this notice will be considered public records.

Title of Collection: William D. Ford Federal Direct Loan (Direct Loan) Program Federal Direct PLUS Loan Master Promissory Note and Endorser Addendum.

OMB Control Number: 1845–0068.

Type of Review: A revision of an existing information collection.

Respondents/Affected Public: Individuals or Households.

Total Estimated Number of Annual Responses: 1,380,923.

Total Estimated Number of Annual Burden Hours: 690,462.

Abstract: The Federal Direct PLUS Loan Master Promissory Note (Direct PLUS Loan MPN) serves as the means by which an individual applies for and agrees to repay a Federal Direct PLUS Loan. The Direct PLUS Loan MPN also informs the borrower of the terms and conditions of Direct PLUS Loan and includes a statement of borrower's rights and responsibilities. A Direct PLUS Loan borrower must not have an adverse credit history. If an applicant for a Direct PLUS Loan is determined to have an adverse credit history, the applicant may qualify for a Direct PLUS Loan by obtaining an endorser who does not have an adverse credit history. The Endorser Addendum serves as the means by which an endorser agrees to repay the Direct PLUS Loan if the borrower does not repay it. This revision incorporates changes to information based on regulatory changes, expands repayment plan information, and clarifies information through updated language.

Dated: December 11, 2015.

Kate Mullan,

Acting Director, Information Collection Clearance Division, Office of the Chief Privacy Officer, Office of Management.

[FR Doc. 2015–31580 Filed 12–15–15; 8:45 am]

BILLING CODE 4000–01–P

DEPARTMENT OF EDUCATION

[Docket No. ED–2015–ICCD–0113]

Agency Information Collection Activities; Submission to the Office of Management and Budget for Review and Approval; Comment Request; TEACH Grant: Study of Institutional Practices and Grant Recipient Outcomes and Experiences

AGENCY: Office of Planning, Evaluation and Policy Development (OPEPD), Department of Education (ED).

ACTION: Notice.

SUMMARY: In accordance with the Paperwork Reduction Act of 1995 (44 U.S.C. chapter 3501 *et seq.*), ED is proposing a new information collection.

DATES: Interested persons are invited to submit comments on or before January 15, 2016.

ADDRESSES: To access and review all the documents related to the information collection listed in this notice, please use *http://www.regulations.gov* by searching the Docket ID number ED–2015–ICCD–0113. Comments submitted in response to this notice should be submitted electronically through the Federal eRulemaking Portal at *http://www.regulations.gov* by selecting the Docket ID number or via postal mail, commercial delivery, or hand delivery. *Please note that comments submitted by fax or email and those submitted after the comment period will not be accepted.* Written requests for information or comments submitted by postal mail or delivery should be addressed to the Director of the Information Collection Clearance Division, U.S. Department of Education, 400 Maryland Avenue SW., LBJ, Room 2E115, Washington, DC 20202–4537.

FOR FURTHER INFORMATION CONTACT: For specific questions related to collection activities, please contact Joanne Bogart, 202–205–7855.

SUPPLEMENTARY INFORMATION: The Department of Education (ED), in accordance with the Paperwork Reduction Act of 1995 (PRA) (44 U.S.C. 3506(c)(2)(A)), provides the general public and Federal agencies with an opportunity to comment on proposed, revised, and continuing collections of information. This helps the Department assess the impact of its information collection requirements and minimize the public's reporting burden. It also helps the public understand the Department's information collection requirements and provide the requested data in the desired format. ED is soliciting comments on the proposed information collection request (ICR) that is described below. The Department of Education is especially interested in public comment addressing the following issues: (1) Is this collection necessary to the proper functions of the Department; (2) will this information be processed and used in a timely manner; (3) is the estimate of burden accurate; (4) how might the Department enhance the quality, utility, and clarity of the information to be collected; and (5) how might the Department minimize the burden of this collection on the respondents, including through the use of information technology. Please note that written comments received in response to this notice will be considered public records.

Title of Collection: TEACH Grant: Study of Institutional Practices and Grant Recipient Outcomes and Experiences

OMB Control Number: 1875—NEW

Type of Review: A new information collection.

Respondents/Affected Public: Individuals or Households, Private Sector

Total Estimated Number of Annual Responses: 243

Total Estimated Number of Annual Burden Hours: 165

Abstract: The U.S. Department of Education (Department) requests OMB clearance for a survey of a purposively selected sample of 473 institutions of higher education, and a sample of 500 randomly selected grant recipients participating in the TEACH Grant

program. The surveys will inform a study addressing issues and challenges regarding the implementation of TEACH Grants, which is being conducted in response to a GAO audit addressing the high grant to loan conversion rate among TEACH grant recipients.

Dated: December 10, 2015.

Tomakie Washington,

Acting Director, Information Collection Clearance Division, Office of the Chief Privacy Officer, Office of Management.

[FR Doc. 2015–31570 Filed 12–15–15; 8:45 am]

BILLING CODE 4000–01–P

DEPARTMENT OF ENERGY

[OE Docket No. PP–82–4]

Application To Amend Presidential Permit; Vermont Electric Power Company, Inc., as Agent for the Joint Owners of the Highgate Project

AGENCY: Office of Electricity Delivery and Energy Reliability, DOE.

ACTION: Notice of Application.

SUMMARY: Vermont Electric Power Company, Inc. (''VELCO''), as operating-and-management agent for the Joint Owners of the Highgate Transmission Interconnection (the ''Highgate Joint Owners'') filed an application to amend PP–82, issued on May 14, 1985 and amended on March 1, 1994, on September 3, 2003, and again on February 7, 2005. The application requested that DOE remove certain operating conditions in the Permit that are no longer necessary.

DATES: Comments or motions to intervene must be submitted on or before February 16, 2016.

ADDRESSES: Comments or motions to intervene should be addressed as follows: Office of Electricity Delivery and Energy Reliability (OE–20), U.S. Department of Energy, 1000 Independence Avenue SW., Washington, DC 20585.

FOR FURTHER INFORMATION CONTACT: Christopher Lawrence (Program Office) at 202–586–5260, or by email to *Christopher.Lawrence@hq.doe.gov,* or Katherine Konieczny (Program Attorney) at 202–586–0503.

SUPPLEMENTARY INFORMATION: The construction, operation, maintenance, and connection of facilities at the international border of the United States for the transmission of electric energy between the United States and a foreign country is prohibited in the absence of a Presidential permit issued pursuant to Executive Order (EO) 10485, as amended by EO 12038.

On November 4, 2015, VELCO filed an application with DOE requesting DOE amend PP–82–3 by removing the last sentence of Article 3's preamble and paragraphs a through d of that article which establish operating conditions and limitations that are no longer necessary for two reasons. First, VELCO asserts that it has made transmission reinforcements to the Highgate Transmission Interconnection (the ''Highgate Facilities'') and other transmission facilities in northern Vermont since 1994. Second, ISO New England Inc. (''ISO–NE''), as the Regional Transmission Organization (RTO) for the six-state New England region, manages real-time operation of these facilities through its operating procedures.

The international transmission facilities authorized by Presidential Permit No. PP–82, as amended, include a back-to-back converter station in Highgate, VT and a 345 kilovolt (kV) transmission line extending approximately 7.5 miles from the converter station to the U.S.-Canada border in Franklin, VT. VELCO does not propose to make any physical changes to the Highgate Facilities but rather asks the Department to amend the permit to reflect the transmission-network reinforcements made since 1994 and the role of ISO–NE., as the Regional Transmission Organization, in managing the real-time operation of the transmission system through its operating procedures. VELCO is also requesting several amendments to the Permit including changes to the ownership of the Highgate Facilities and a language change to Article 3 to better reflect the way energy is scheduled and flows over the Highgate Facilities.[1]

Procedural Matters: Any person may comment on this application by filing such comment at the address provided above. Any person seeking to become a party to this proceeding must file a motion to intervene at the address provided above in accordance with Rule 214 of FERC's Rules of Practice and Procedure (18 CFR 385.214). Two copies of each comment or motion to intervene should be filed with DOE on or before the date listed above.

Additional copies of such motions to intervene also should be filed directly with: Mr. Christopher Root, Chief Operating Officer, Vermont Electric Power Company, Inc., 366 Pinnacle Ridge Road, Rutland, VT 05701, *koneill@velco.com* AND John H. Marshall, Esq., Downs Rachlin Martin PLLC, 90 Prospect Street, P. O. Box 99, St. Johnsbury, VT 05819–0099, *jmarshall@drm.com.*

Before a Presidential permit may be granted or amended, DOE must determine that the proposed action will not adversely impact on the reliability of the U.S. electric power supply system. In addition, DOE must consider the environmental impacts of the proposed action (*i.e.,* granting the Presidential permit or amendment, with any conditions and limitations, or denying the permit) pursuant to the National Environmental Policy Act of 1969. DOE also must obtain the concurrences of the Secretary of State and the Secretary of Defense before taking final action on a Presidential permit application.

Copies of this application will be made available, upon request, for public inspection and copying at the address provided above. In addition, the application may be reviewed or downloaded electronically at *http://energy.gov/oe/services/electricity-policy-coordination-and-implementation/international-electricity-regulatio-2.* Upon reaching the home page, select ''Pending Applications.''

Issued in Washington, DC, on December 10, 2015.

Christopher A. Lawrence,

Electricity Policy Analyst, Office of Electricity Delivery and Energy Reliability.

[FR Doc. 2015–31622 Filed 12–15–15; 8:45 am]

BILLING CODE 6450–01–P

[1] The amendment would replace the words ''maximum instantaneous rate of transmission'' with ''scheduled rate of transmission.''

DEPARTMENT OF ENERGY

Office of Energy Efficiency and Renewable Energy

[Case No. CW–026]

Notice of Petition for Waiver of Whirlpool Corporation From the Department of Energy Clothes Washer Test Procedure, and Grant of Interim Waiver

AGENCY: Office of Energy Efficiency and Renewable Energy, Department of Energy.

ACTION: Notice of petition for waiver, notice of grant of interim waiver, and request for comments.

SUMMARY: This notice announces receipt of a petition for waiver from Whirlpool Corporation (Whirlpool) seeking an exemption from specified portions of the U.S. Department of Energy (DOE) test procedure for determining the energy consumption of residential clothes washers. Whirlpool seeks to use an alternate test procedure to address

certain issues involved in testing certain specific basic clothes washer models identified in its petition that container volumes between 6.0 cubic feet and 8.0 cubic feet that Whirlpool contends cannot be accurately tested using the currently applicable DOE test procedure. DOE solicits comments, data, and information concerning Whirlpool's petition and its suggested alternate test procedure. This notice also grants Whirlpool with an interim waiver from the residential clothes washer test procedure, subject to use of the alternative test procedure set forth in this notice.

DATES: DOE will accept comments, data, and information with respect to the Whirlpool petition until January 15, 2016.

ADDRESSES: You may submit comments, identified by Case Number CW–026, by any of the following methods:

- *Federal eRulemaking Portal: http://www.regulations.gov.* Follow the instructions for submitting comments.
- *Email: AS_Waiver_Requests@ee.doe.gov* Include ''Case No. CW–026'' in the subject line of the message.
- *Mail:* Ms. Brenda Edwards, U.S. Department of Energy, Building Technologies Program, Mailstop EE–5B/1000 Independence Avenue SW., Washington, DC 20585–0121. Telephone: (202) 586–2945. Please submit one signed original paper copy.
- *Hand Delivery/Courier:* Ms. Brenda Edwards, U.S. Department of Energy, Building Technologies Program, 950 L'Enfant Plaza SW., Room 6094, Washington, DC 20024. Please submit one signed original paper copy.

Docket: For access to the docket to review the background documents relevant to this matter, you may visit the U.S. Department of Energy, 950 L'Enfant Plaza SW., Washington, DC, 20024; (202) 586–2945, between 9:00 a.m. and 4:00 p.m., Monday through Friday, except Federal holidays. Available documents include the following items: (1) This notice; (2) public comments received; (3) the petition for waiver and application for interim waiver; and (4) prior DOE waivers and rulemakings regarding similar clothes washer products. Please call Ms. Brenda Edwards at the above telephone number for additional information.

FOR FURTHER INFORMATION CONTACT: Mr. Bryan Berringer, U.S. Department of Energy, Building Technologies Program, Mail Stop EE–5B, Forrestal Building, 1000 Independence Avenue SW., Washington, DC 20585–0121. Telephone: (202) 586–0371. Email: *Bryan.Berringer@ee.doe.gov.*

Ms. Elizabeth Kohl, U.S. Department of Energy, Office of the General Counsel, Mail Stop GC–33, Forrestal Building, 1000 Independence Avenue SW., Washington, DC 20585–0103. Telephone: (202) 586–7796. Email: *Elizabeth.Kohl@hq.doe.gov.*

SUPPLEMENTARY INFORMATION:

I. Background and Authority

Title III, Part B of the Energy Policy and Conservation Act of 1975 (EPCA), Public Law 94–163 (42 U.S.C. 6291–6309, as codified), established the Energy Conservation Program for Consumer Products Other Than Automobiles, a program covering most major household appliances, which includes the clothes washers that are the focus of this notice. Part B includes definitions, test procedures, labeling provisions, energy conservation standards, and the authority to require information and reports from manufacturers. Further, Part B authorizes the Secretary of Energy to prescribe test procedures that are reasonably designed to produce results which measure energy efficiency, energy use, or estimated operating costs, and that are not unduly burdensome to conduct. (42 U.S.C. 6293(b)(3)). Part C of Title III provides for a similar energy efficiency program titled ''Certain Industrial Equipment,'' which includes commercial clothes washers and other types of commercial equipment.[1] (42 U.S.C. 6311–6317) The test procedure for automatic and semi-automatic clothes washers (both residential and commercial) is contained in 10 CFR part 430, subpart B, appendix J2.

The regulations set forth in 10 CFR part 430.27 contain provisions that enable a person to seek a waiver from the test procedure requirements for covered products. DOE will grant a waiver if it is determined either that the basic models for which the petition for waiver was requested contains a design characteristics that prevents testing of the basic model according to the prescribed test procedures, or that prescribed test procedures evaluate the basic model in a manner so unrepresentative of its true energy consumption characteristics as to provide materially inaccurate comparative data. 10 CFR 430.27(f)(2). Petitioners must include in their petition any alternate test procedures known to the petitioner to evaluate the basic model in a manner representative of its energy consumption. DOE may grant the waiver subject to conditions, including adherence to alternate test procedures. 10 CFR 430.27(f)(2). Waivers remain in effect pursuant to the provisions of 10 CFR 430.27(l).

The waiver process also allows the DOE to grant an interim waiver from test procedure requirements to manufacturers that have petitioned DOE for a waiver of such prescribed test procedures. 10 CFR 430.27(e)(2). Within one year of issuance of an interim waiver, DOE will either: (i) Publish in the **Federal Register** a determination on the petition for waiver; or (ii) publish in the **Federal Register** a new or amended test procedure that addresses the issues presented in the waiver. 10 CFR 430.27(h)(1). When DOE amends the test procedure to address the issues presented in a waiver, the waiver will automatically terminate on the date on which use of that test procedure is required to demonstrate compliance. 10 CFR 430.27(h)(2).

II. Application for Interim Waiver and Petition for Waiver

On November 9, 2015, Whirlpool submitted a petition for waiver from the DOE test procedure applicable to automatic and semi-automatic clothes washers set forth in 10 CFR part 430, subpart B, appendix J2. Whirlpool requested the waiver because the mass of the test load used in the procedure, which is based on the basket volume of the test unit, is currently not defined for basket sizes greater than 6.0 cubic feet. In its petition, Whirlpool seeks a waiver for the specified basic models with capacities greater than 6.0 cubic feet. Table 5.1 of Appendix J2 defines the test load sizes used in the test procedure as linear functions of the basket volume. Whirlpool requests that DOE grant a waiver for testing and rating based on a revised Table 5.1.

Whirlpool also requests an interim waiver from the existing DOE test procedure. An interim waiver may be granted if it appears likely that the petition for waiver will be granted, and/or if DOE determines that it would be desirable for public policy reasons to grant immediate relief pending a determination of the petition for waiver. See 10 CFR 430.27(e)(2).

DOE understands that absent an interim waiver, Whirlpool's products cannot be tested and rated for energy consumption on a basis representative of their true energy consumption characteristics. DOE has reviewed the alternate procedure and concludes that it will allow for the accurate measurement of the energy use of these products, while alleviating the testing problems associated with Whirlpool's implementation of clothes washer

[1] For editorial reasons, upon codification in the U.S. Code, Parts B and C were re-designated Parts A and A–1, respectively.

containers larger than 6.0 cubic feet. Consequently, DOE has determined that Whirlpool's petition for waiver will likely be granted. Furthermore, as explained below, DOE has granted similar waivers to Whirlpool and other manufacturers, and has determined that it is desirable for public policy reasons to grant Whirlpool immediate relief pending a determination of the petition for waiver.

DOE granted a waiver to Whirlpool for a similar request under Decision and Order (75 FR 69653, Nov. 15, 2010) to allow for the testing of clothes washers with container volumes between 3.8 cubic feet and 6.0 cubic feet. In addition to the previous waiver granted to Whirlpool, DOE granted waivers to LG (CW–016 (76 FR 11233, Mar. 1, 2011), CW–018 (76 FR 21879, Apr. 19, 2011), and CW–021 (76 FR 64330, Oct. 18, 2011); General Electric (75 FR 76968, Dec. 10, 2010), Samsung (76 FR 13169, Mar. 10, 2011); 76 FR 50207, Aug. 12, 2011), and Electrolux (76 FR 11440, Mar. 2, 2011) to allow for the testing of clothes washers with container volumes between 3.8 cubic feet and 6.0 cubic feet. DOE concludes it is likely that Whirlpool's petition for waiver will be granted for the similar reasons stated in these past waivers.

The current DOE test procedure specifies test load sizes only for machines with capacities up to 6.0 cubic feet. (77 FR 13888, Mar. 7, 2012; the ''March 2012 Final Rule'') For the reasons set forth in DOE's March 2012 Final Rule, DOE concludes that extending the linear relationship between test load size and container capacity to larger capacities is valid. In addition, testing a basic model with a capacity larger than 6.0 cubic feet using the current procedure could evaluate the basic model in a manner so unrepresentative of its true energy consumption as to provide materially inaccurate comparative data. Based on these considerations, and the waivers granted to LG, GE, Electrolux and Samsung, as well as the previous waivers granted to Whirlpool for similar requests, it appears likely that the petition for waiver will be granted. As a result, DOE grants an interim waiver to Whirlpool for the basic models of clothes washers with container volumes greater than 6.0 cubic feet specified in its petition for waiver. DOE also provides for the use of an alternative test procedure extending the linear relationship between test load size and container capacity, described below.

Therefore, *it is ordered that:*

The application for interim waiver filed by Whirlpool is hereby granted for the specified Whirlpool clothes washer basic models, subject to the specifications and conditions below. Whirlpool shall be required to test and rate the specified clothes washer products according to the alternate test procedure as set forth in section III, ''Alternate Test Procedure.''

The interim waiver applies to the following basic residential model groups: Basic Model V15EAg50(3B), Basic Model V15EBg50(3B), Basic Model V15ECg50(3B).

DOE makes decisions on waivers and interim waivers for only those models specifically set out in the petition, not future models that may be manufactured by the petitioner. Whirlpool may request that DOE extend the scope of a waiver or an interim waiver to include additional basic models employing the same technology as the basic model(s) set forth in the original petition consistent with 10 CFR 430.27(g). In addition, granting of an interim waiver or waiver does not release a petitioner from the certification requirements set forth at 10 CFR part 429. See also 10 CFR 430.27(a) and (i).

Further, this interim waiver is conditioned upon the presumed validity of statements, representations, and documents provided by the petitioner. DOE may rescind or modify a waiver or interim waiver at any time upon a determination that the factual basis underlying the petition for waiver or interim waiver is incorrect, or upon a determination that the results from the alternate test procedure are unrepresentative of the basic models' true energy consumption characteristics. See 10 CFR 430.27(k).

III. Alternate Test Procedure

EPCA requires that manufacturers use DOE test procedures when making representations about the energy consumption and energy consumption costs of products covered by the statute. (42 U.S.C. 6293(c)) Consistent representations are important for manufacturers to use in making representations about the energy efficiency of their products and to demonstrate compliance with applicable DOE energy conservation standards. Pursuant to its regulations applicable to waivers and interim waivers from applicable test procedures at 10 CFR 430.27, DOE will consider setting an alternate test procedure for Whirlpool in a subsequent Decision and Order.

The alternate procedure approved today is intended to allow Whirlpool to make valid representations regarding its clothes washers with basket capacities larger than provided for in the current test procedure.

In the alternate test procedure described below, DOE has corrected two errors in the proposed Whirlpool load size table:

- For the 7.40–7.50 cubic foot capacity row, the maximum load size should be 30.60 lbs rather than 30.50 lbs, and the corresponding translation to kg should be 13.88 kg rather than 13.83 kg.
- For the 6.50–6.60 and higher capacities, the average load size was not calculated correctly. The average load size should be the numerical average of the minimum and maximum load sizes. For each of these, the corresponding translation to kg were updated.

During the period of the interim waiver granted in this notice, Whirlpool shall test its clothes washer basic models according to the provisions of 10 CFR part 430 subpart B, appendix J2, except that the expanded Table 5.1 below shall be substituted for Table 5.1 of appendix J2.

TABLE 5.1—TEST LOAD SIZES

Container volume		Minimum load		Maximum load		Average load	
cu. ft. ≥ <	liter ≥ <	lb	kg	lb	kg	lb	kg
0–0.80	0–22.7	3.00	1.36	3.00	1.36	3.00	1.36
0.80–0.90	22.7–25.5	3.00	1.36	3.50	1.59	3.25	1.47
0.90–1.00	25.5–28.3	3.00	1.36	3.90	1.77	3.45	1.56
1.00–1.10	28.3–31.1	3.00	1.36	4.30	1.95	3.65	1.66
1.10–1.20	31.1–34.0	3.00	1.36	4.70	2.13	3.85	1.75
1.20–1.30	34.0–36.8	3.00	1.36	5.10	2.31	4.05	1.84
1.30–1.40	36.8–39.6	3.00	1.36	5.50	2.49	4.25	1.93
1.40–1.50	39.6–42.5	3.00	1.36	5.90	2.68	4.45	2.02

TABLE 5.1—TEST LOAD SIZES—Continued

Container volume		Minimum load		Maximum load		Average load	
cu. ft. ≥ <	liter ≥ <	lb	kg	lb	kg	lb	kg
1.50–1.60	42.5–45.3	3.00	1.36	6.40	2.90	4.70	2.13
1.60–1.70	45.3–48.1	3.00	1.36	6.80	3.08	4.90	2.22
1.70–1.80	48.1–51.0	3.00	1.36	7.20	3.27	5.10	2.31
1.80–1.90	51.0–53.8	3.00	1.36	7.60	3.45	5.30	2.40
1.90–2.00	53.8–56.6	3.00	1.36	8.00	3.63	5.50	2.49
2.00–2.10	56.6–59.5	3.00	1.36	8.40	3.81	5.70	2.59
2.10–2.20	59.5–62.3	3.00	1.36	8.80	3.99	5.90	2.68
2.20–2.30	62.3–65.1	3.00	1.36	9.20	4.17	6.10	2.77
2.30–2.40	65.1–68.0	3.00	1.36	9.60	4.35	6.30	2.86
2.40–2.50	68.0–70.8	3.00	1.36	10.00	4.54	6.50	2.95
2.50–2.60	70.8–73.6	3.00	1.36	10.50	4.76	6.75	3.06
2.60–2.70	73.6–76.5	3.00	1.36	10.90	4.94	6.95	3.15
2.70–2.80	76.5–79.3	3.00	1.36	11.30	5.13	7.15	3.24
2.80–2.90	79.3–82.1	3.00	1.36	11.70	5.31	7.35	3.33
2.90–3.00	82.1–85.0	3.00	1.36	12.10	5.49	7.55	3.42
3.00–3.10	85.0–87.8	3.00	1.36	12.50	5.67	7.75	3.52
3.10–3.20	87.8–90.6	3.00	1.36	12.90	5.85	7.95	3.61
3.20–3.30	90.6–93.4	3.00	1.36	13.30	6.03	8.15	3.70
3.30–3.40	93.4–96.3	3.00	1.36	13.70	6.21	8.35	3.79
3.40–3.50	96.3–99.1	3.00	1.36	14.10	6.40	8.55	3.88
3.50–3.60	99.1–101.9	3.00	1.36	14.60	6.62	8.80	3.99
3.60–3.70	101.9–104.8	3.00	1.36	15.00	6.80	9.00	4.08
3.70–3.80	104.8–107.6	3.00	1.36	15.40	6.99	9.20	4.17
3.80–3.90	107.6–110.4	3.00	1.36	15.80	7.16	9.40	4.26
3.90–4.00	110.4–113.3	3.00	1.36	16.20	7.34	9.60	4.35
4.00–4.10	113.3–116.1	3.00	1.36	16.60	7.53	9.80	4.45
4.10–4.20	116.1–118.9	3.00	1.36	17.00	7.72	10.00	4.54
4.20–4.30	118.9–121.8	3.00	1.36	17.40	7.90	10.20	4.63
4.30–4.40	121.8–124.6	3.00	1.36	17.80	8.09	10.40	4.72
4.40–4.50	124.6–127.4	3.00	1.36	18.20	8.27	10.60	4.82
4.50–4.60	127.4–130.3	3.00	1.36	18.70	8.46	10.85	4.91
4.60–4.70	130.3–133.1	3.00	1.36	19.10	8.65	11.05	5.00
4.70–4.80	133.1–135.9	3.00	1.36	19.50	8.83	11.25	5.10
4.80–4.90	135.9–138.8	3.00	1.36	19.90	9.02	11.45	5.19
4.90–5.00	138.8–141.6	3.00	1.36	20.30	9.20	11.65	5.28
5.00–5.10	141.6–144.4	3.00	1.36	20.70	9.39	11.85	5.38
5.10–5.20	144.4–147.2	3.00	1.36	21.10	9.58	12.05	5.47
5.20–5.30	147.2–150.1	3.00	1.36	21.50	9.76	12.25	5.56
5.30–5.40	150.1–152.9	3.00	1.36	21.90	9.95	12.45	5.65
5.40–5.50	152.9–155.7	3.00	1.36	22.30	10.13	12.65	5.75
5.50–5.60	155.7–158.6	3.00	1.36	22.80	10.32	12.90	5.84
5.60–5.70	158.6–161.4	3.00	1.36	23.20	10.51	13.10	5.93
5.70–5.80	161.4–164.2	3.00	1.36	23.60	10.69	13.30	6.03
5.80–5.90	164.2–167.1	3.00	1.36	24.00	10.88	13.50	6.12
5.90–6.00	167.1–169.9	3.00	1.36	24.40	11.06	13.70	6.21
6.00–6.10	169.9–172.7	3.00	1.36	24.80	11.25	13.90	6.30
6.10–6.20	172.7–175.6	3.00	1.36	25.20	11.43	14.10	6.40
6.20–6.30	175.6–178.4	3.00	1.36	25.60	11.61	14.30	6.49
6.30–6.40	178.4–181.2	3.00	1.36	26.00	11.79	14.50	6.58
6.40–6.50	181.2–184.1	3.00	1.36	26.40	11.97	14.70	6.67
6.50–6.60	184.1–186.9	3.00	1.36	26.90	12.20	14.95	6.78
6.60–6.70	186.9–189.7	3.00	1.36	27.30	12.38	15.15	6.87
6.70–6.80	189.7–192.6	3.00	1.36	27.70	12.56	15.35	6.96
6.80–6.90	192.6–195.4	3.00	1.36	28.10	12.75	15.55	7.05
6.90–7.00	195.4–198.2	3.00	1.36	28.50	12.93	15.75	7.14
7.00–7.10	198.2–201.0	3.00	1.36	28.90	13.11	15.95	7.23
7.10–7.20	201.0–203.9	3.00	1.36	29.30	13.29	16.15	7.33
7.20–7.30	203.9–206.7	3.00	1.36	29.70	13.47	16.35	7.42
7.30–7.40	206.7–209.5	3.00	1.36	30.10	13.65	16.55	7.51
7.40–7.50	209.5–212.4	3.00	1.36	30.60	13.88	16.80	7.62
7.50–7.60	212.4–215.2	3.00	1.36	31.00	14.06	17.00	7.71
7.60–7.70	215.2–218.0	3.00	1.36	31.40	14.24	17.20	7.80
7.70–7.80	218.0–220.9	3.00	1.36	31.80	14.42	17.40	7.89
7.80–7.90	220.9–223.7	3.00	1.36	32.20	14.61	17.60	7.98
7.90–8.00	223.7–226.5	3.00	1.36	32.60	14.79	17.80	8.07

IV. Summary and Request for Comments

Through this notice, DOE grants Whirlpool an interim waiver from the specified portions of the test procedure applicable to certain basic models of residential clothes washer with capacities larger than 6.0 cubic feet and announces receipt of Whirlpool's petition for waiver from those same portions of the test procedure. DOE is publishing Whirlpool's petition for waiver pursuant to 10 CFR 430.27(b)(1)(iv). The petition includes a suggested alternate test procedure to determine the energy consumption of Whirlpool's specified basic models of residential clothes washer with capacities larger than 6.0 cubic feet. Whirlpool is required to follow this alternate procedure, as corrected by DOE in Section III of this notice, as a condition of its interim waiver, and DOE is considering including the corrected alternate procedure in its subsequent Decision and Order.

DOE solicits comments from interested parties on all aspects of the petition, including the suggested alternate test procedure and calculation methodology. Pursuant to 10 CFR 430.27(d), any person submitting written comments to DOE must also send a copy of such comments to the petitioner. The contact information for the petitioner is Sean Southard, Senior Analyst, Regulatory Affairs, Whirlpool Corporation, 2000 N. M63—MD 1604, Benton Harbor, MI 49022. All comment submissions to DOE must include the Case Number CW–026 for this proceeding. Submit electronic comments in Microsoft Word, Portable Document Format (PDF), or text (American Standard Code for Information Interchange (ASCII)) file format and avoid the use of special characters or any form of encryption. Wherever possible, include the electronic signature of the author. DOE does not accept telefacsimiles (faxes).

Issued in Washington, DC, on December 9, 2015.

Kathleen Hogan,

Deputy Assistant Secretary for Energy Efficiency, Energy Efficiency and Renewable Energy.

Whirlpool Corporation
ADMINISTRATIVE CENTER
2000 N. M63—MD 1604
BENTON HARBOR, MI 49022
269.923.7258

November 9, 2015

Via Email: *AS_Waiver_Requests@ee.doe.gov*

Assistant Secretary for Conservation and Renewable Energy
U.S. Department of Energy
Building Technologies Program, Test Procedure Waiver
1000 Independence Avenue SW
Washington, DC 20585
John.Cymbalski@ee.doe.gov

Re: *Petition for Waiver & Application for Interim Waiver Regarding Measurement of Energy Consumption of Residential Clothes Washers, Using 10 CFR part 430, subpart B, Appendix J2*

Whirlpool Corporation (''Whirlpool'') is submitting this Petition for Waiver (''Waiver''), and Application for Interim Waiver (''Interim Waiver''), pursuant to 10 CFR 430.27, regarding the Department of Energy (''DOE'') Test Procedures for energy and water consumption of clothes washers.

Whirlpool requests that DOE grant Whirlpool a Waiver and Interim Waiver from certain parts of the DOE 10 CFR 430, Subpart B, Appendix J2 test procedure for determining residential clothes washer energy consumption, and that DOE allow Whirlpool to test its clothes washers pursuant to the modified Appendix J2 table submitted in this Petition. The J2 test procedure does not allow for the testing of clothes washer container volumes beyond 6.0 cubic feet, as indicated in Table 5.1 of the Appendix J2 test procedure, and described in the Final Guidance for ''How are large-capacity clothes washers tested, rated, and certified?'' issued by DOE on May 29, 2012. Without a DOE grant of a Waiver and Interim Waiver, Whirlpool will not be able to introduce new, innovative large capacity clothes washers to consumers demanding them in the market.

Whirlpool submits that the proposed modified Appendix J2 table is fully consistent with the approach used in previous (and currently expired) clothes washer waiver petitions that extrapolated existing container volumes and load sizes in a modified Table 5.1 in Appendix J1 to allow for the testing of clothes washers with container volumes between 3.8 cubic feet and 6.0 cubic feet. These waivers were granted on several occasions to multiple companies before the May 2012 Final Guidance was issued by DOE to modify Table 5.1 in Appendix J1 to allow for the testing of clothes washers between 3.8 cubic feet and 6.0 cubic feet. Whirlpool now proposes to modify Table 5.1 in Appendix J2 to accommodate the testing of clothes washers with measured capacities between 6.0 cubic feet and 8.0 cubic feet. Whirlpool notes that this request is consistent with DOE's authority to grant a Waiver. Whirlpool further submits that it is within the DOE's authority to grant an Interim Waiver to avoid economic hardship and competitive disadvantage for Whirlpool.

1. Whirlpool Corporation

Whirlpool Corporation is the number one major appliance manufacturer in the world, with approximately $20 billion in annual sales, 100,000 employees and 70 manufacturing and technology research centers throughout the world in 2014. The company markets *Whirlpool, KitchenAid, Maytag, Consul, Brastemp, Amana, Bauknecht, Jenn-Air, Indesit* and other major brand names in more than 170 countries. Whirlpool's worldwide headquarters are located at 2000 North M–63, Benton Harbor, Michigan, USA. Additional information about the company can be found at WhirlpoolCorp.com, or find us on Twitter at @WhirlpoolCorp.

2. Basic Models Subject To The Waiver Request

This Petition For Waiver and Application For Interim Waiver is for all basic models of residential clothes washers manufactured by Whirlpool Corporation that have a measured Appendix J2 container volume equal to or greater than 6.0 cubic feet and equal to or less than 8.0 cubic feet.

Specific Basic Models are:
Basic Model V15EAg50(3B)
Basic Model V15EBg50(3B)
Basic Model V15ECg50(3B)

3. Requested Waiver

Whirlpool requests approval to test the energy and water consumption of the above residential clothes washers basic models using the modified table found in Exhibit A for the Appendix J2 clothes washer test procedure.

Market conditions, including strong consumer demand for large capacity residential washers, have led Whirlpool to design clothes washers with volumes greater than 6.0 cubic feet. DOE has recognized this in the past when previous prevailing market conditions led manufacturers to design residential washers beyond 3.8 cubic feet, and DOE has granted multiple waivers to multiple manufacturers to accommodate their request to modify Table 5.1 to allow for the testing of these larger capacity washers between 3.8 cubic feet and 6.0 cubic feet.

Whirlpool's proposed modified Table 5.1 is attached at Exhibit A. This modified table extrapolates load sizes for washers with container volumes between 6.0 cubic feet and 8.0 cubic feet, based on the linear equations used in the existing Table 5.1 for load sizes used with basket volumes up to 6.0 cubic feet. This is similar to the

approach that other manufacturers have used in previous waiver petitions to extrapolate load sizes for container volumes between 3.8 cubic feet and 6.0 cubic feet, and modify Table 5.1 in Appendix J1.[2]

4. Regulatory Framework

DOE's regulations, found in 10 CFR part 430.27, provide that the Assistant Secretary will grant a Petition to a manufacturer upon ''*determin[ation] that the basic model for which the waiver was requested contains a design characteristic which either prevents testing of the basic model according to the prescribed test procedures, or the prescribed test procedures may evaluate the basic model in a manner so unrepresentative of its true energy consumption characteristics as to provide materially inaccurate comparative data.''*

Whirlpool believes that this Petition meets both conditions stated above for when DOE will grant a Petition. First, Table 5.1 of Appendix J2 defines test load sizes as linear functions of the container volume, but the Table only lists basket volumes up to 6.0 cubic feet. As a result, Whirlpool's new large capacity residential washer basic models listed above cannot be currently tested to the prescribed test procedure. Second, if Whirlpool were to test its large capacity residential washers listed above to the current load sizes listed under the container volume limit of 5.9–6.0 cubic foot, the results of that energy and water test would be unrepresentative of the true energy consumption characteristics of these new models by underestimating their energy use.

5. Other Manufacturers With Similar Design Characteristics

To the best of our knowledge, Whirlpool is not aware of other manufacturers offering residential clothes washers with a measured container volume greater than or equal to 6.0 cubic feet.

6. Additional Justification For Interim Waiver Application

Granting of an Interim Waiver is justified in this case because: (i) Whirlpool has provided strong evidence that demonstrates the likelihood of the granting of the Petition for Waiver; (ii) Whirlpool will suffer significant economic hardship and competitive disadvantage if this Interim Waiver Application is not granted; and (iii) an Interim Waiver is desirable for public policy reasons.

a. Strong Likelihood That Waiver Will Be Granted

Whirlpool has provided strong evidence that the Waiver should be granted. A Petition for Waiver is appropriate because these large capacity washers with measured container volumes above 6.0 cubic feet contain a design characteristic (container volumes beyond those listed in Table 5.1 of Appendix J2) that prevents testing of these models according to the Appendix J2 test procedure. Also, using the existing largest container volume listed in Table 5.1 of Appendix J2 (5.9–6.0 cubic feet), would provided a tested energy consumption characteristic that is unrepresentative of the true energy consumption of the models.

Whirlpool has provided ample information in this Petition for Waiver and Application for Interim Waiver explaining its rationale for using the modified Table 5.1 found in Exhibit A. Whirlpool has demonstrated that such a modified Table is consistent with past waiver approaches that other manufacturers have taken to receive DOE waivers for container volumes between 3.8 cubic feet and 6.0 cubic feet before Table 5.1 in Appendix J1 was recently revised.

b. Economic Hardship & Competitive Disadvantage

In the absence of an Interim Waiver, Whirlpool will lack certainty as to whether it can launch these large capacity washers into the market. As mentioned before, Whirlpool predicts strong consumer demand for these large capacity washers, and the inability to bring them to market through denial of an Interim Waiver will cause economic hardship and competitive disadvantage for Whirlpool.

There are long lead times and significant expenses associated with the design and manufacture of residential clothes washers. Compliance with federally mandated energy and water consumption standards is a critical design factor for all of Whirlpool's washers. Any delay in obtaining clarity on this issue will require Whirlpool to postpone key decisions regarding its investments to build, launch, and market these washers, and/or require Whirlpool to implement costly contingency plans. In the event this Waiver request is not approved, Whirlpool would not be able to move forward with the launch of these models, which would be a multi-million dollar impact to the company, potentially result in the loss of American jobs at our Clyde, OH manufacturing facility, and put us at a competitive disadvantage to competitors that market washers larger than any models we currently offer.

Further, any denial for the Interim Waiver would not only impact our large capacity washer models listed in this petition, it would also impact the matching dryers that would be sold with these washers. The washers and dryers are intended to be sold as a matching pair, with a dryer capacity in the dryer that is optimized to be used with one of our large capacity washers. If Whirlpool is not granted the Interim Waiver, we would be forced to do two things: (i) postpone the launch of these dryers until a waiver is granted for the matching large capacity washers, or (ii) sell large capacity dryers in the market without a matching washer. If we postpone the launch, this would be a significant business disruption, resulting in a multi-million dollar impact to the company and put American jobs at risk at our Marion, OH manufacturing facility. If we sell these dryers in the market without their matching washer, we would expect significantly lower sales of the dryer than we would otherwise expect with the matching washer on the market. Most dryers are sold with a matching washer, for various reasons, and many consumers would not want to purchase a non-matching washer and this dryer. There would also be unused capacity and potentially wasted energy in the dryer, since its capacity is optimized to be used with the large capacity matching washer.

c. An Interim Waiver is Desirable for Public Policy Reasons

It would be desirable for public policy reasons to grant immediate relief by granting an Interim Waiver. It would immediately make available to the public the largest capacity residential clothes washers available on the market. For many consumers that purchase this washer, this would mean more clothing items that can be washed in a single load. For those consumers that maximize the clothes washer capacity, this equates to fewer loads per year, which is less water and energy use compared to the alternative of smaller and more frequent loads.

Not granting the waiver would also potentially put U.S. jobs at our manufacturing facilities in Clyde, OH and Marion, OH at risk, if Whirlpool cannot launch these large capacity washers and dryers. Whirlpool employs 3,000 people at the washer manufacturing facility in Clyde, OH and

[2] See Federal Register/Vol. 76, No. 246/79666–79669 and Federal Register/Vol. 75, No. 219/69653–69655

2,500 people at the dryer manufacturing facility in Marion, OH.

7. CERTIFICATION OF NOTICE TO OTHER MANUFACTURERS

Whirlpool Corporation is providing concurrent notice of this Petition for Waiver & Application for Interim Waiver to the other known manufacturers of residential clothes washers made or sold in the U.S., and to the Association of Home Appliance Manufacturers. The cover letters, including names and addresses of other known manufacturers and the industry association, is included in Exhibit B.

8. CONCLUSION

Whirlpool respectfully submits that the DOE grant the above Petition for Waiver and Interim Waiver. By granting this Waiver, DOE will ensure that consumers will have access to new, innovative large capacity residential washers and Whirlpool will avoid economic hardship and competitive disadvantage.

Thank you in advance for your consideration and prompt response.

Sincerely,

Sean Southard

Senior Analyst, Regulatory Affairs

Whirlpool Corporation

EXHIBIT A: MODIFIED TABLE 5.1—TEST LOAD SIZES—10 CFR 430, SUBPART B, APPENDIX J2

Container volume		Minimum load		Maximum load		Average load	
cu. ft. ≥ <	liter ≥ <	lb	kg	lb	kg	lb	kg
0–0.80	0–22.7	3.00	1.36	3.00	1.36	3.00	1.36
0.80–0.90	22.7–25.5	3.00	1.36	3.50	1.59	3.25	1.47
0.90–1.00	25.5–28.3	3.00	1.36	3.90	1.77	3.45	1.56
1.00–1.10	28.3–31.1	3.00	1.36	4.30	1.95	3.65	1.66
1.10–1.20	31.1–34.0	3.00	1.36	4.70	2.13	3.85	1.75
1.20–1.30	34.0–36.8	3.00	1.36	5.10	2.31	4.05	1.84
1.30–1.40	36.8–39.6	3.00	1.36	5.50	2.49	4.25	1.93
1.40–1.50	39.6–42.5	3.00	1.36	5.90	2.68	4.45	2.02
1.50–1.60	42.5–45.3	3.00	1.36	6.40	2.90	4.70	2.13
1.60–1.70	45.3–48.1	3.00	1.36	6.80	3.08	4.90	2.22
1.70–1.80	48.1–51.0	3.00	1.36	7.20	3.27	5.10	2.31
1.80–1.90	51.0–53.8	3.00	1.36	7.60	3.45	5.30	2.40
1.90–2.00	53.8–56.6	3.00	1.36	8.00	3.63	5.50	2.49
2.00–2.10	56.6–59.5	3.00	1.36	8.40	3.81	5.70	2.59
2.10–2.20	59.5–62.3	3.00	1.36	8.80	3.99	5.90	2.68
2.20–2.30	62.3–65.1	3.00	1.36	9.20	4.17	6.10	2.77
2.30–2.40	65.1–68.0	3.00	1.36	9.60	4.35	6.30	2.86
2.40–2.50	68.0–70.8	3.00	1.36	10.00	4.54	6.50	2.95
2.50–2.60	70.8–73.6	3.00	1.36	10.50	4.76	6.75	3.06
2.60–2.70	73.6–76.5	3.00	1.36	10.90	4.94	6.95	3.15
2.70–2.80	76.5–79.3	3.00	1.36	11.30	5.13	7.15	3.24
2.80–2.90	79.3–82.1	3.00	1.36	11.70	5.31	7.35	3.33
2.90–3.00	82.1–85.0	3.00	1.36	12.10	5.49	7.55	3.42
3.00–3.10	85.0–87.8	3.00	1.36	12.50	5.67	7.75	3.52
3.10–3.20	87.8–90.6	3.00	1.36	12.90	5.85	7.95	3.61
3.20–3.30	90.6–93.4	3.00	1.36	13.30	6.03	8.15	3.70
3.30–3.40	93.4–96.3	3.00	1.36	13.70	6.21	8.35	3.79
3.40–3.50	96.3–99.1	3.00	1.36	14.10	6.40	8.55	3.88
3.50–3.60	99.1–101.9	3.00	1.36	14.60	6.62	8.80	3.99
3.60–3.70	101.9–104.8	3.00	1.36	15.00	6.80	9.00	4.08
3.70–3.80	104.8–107.6	3.00	1.36	15.40	6.99	9.20	4.17
3.80–3.90	107.6–110.4	3.00	1.36	15.80	7.16	9.40	4.26
3.90–4.00	110.4–113.3	3.00	1.36	16.20	7.34	9.60	4.35
4.00–4.10	113.3–116.1	3.00	1.36	16.60	7.53	9.80	4.45
4.10–4.20	116.1–118.9	3.00	1.36	17.00	7.72	10.00	4.54
4.20–4.30	118.9–121.8	3.00	1.36	17.40	7.90	10.20	4.63
4.30–4.40	121.8–124.6	3.00	1.36	17.80	8.09	10.40	4.72
4.40–4.50	124.6–127.4	3.00	1.36	18.20	8.27	10.60	4.82
4.50–4.60	127.4–130.3	3.00	1.36	18.70	8.46	10.85	4.91
4.60–4.70	130.3–133.1	3.00	1.36	19.10	8.65	11.05	5.00
4.70–4.80	133.1–135.9	3.00	1.36	19.50	8.83	11.25	5.10
4.80–4.90	135.9–138.8	3.00	1.36	19.90	9.02	11.45	5.19
4.90–5.00	138.8–141.6	3.00	1.36	20.30	9.20	11.65	5.28
5.00–5.10	141.6–144.4	3.00	1.36	20.70	9.39	11.85	5.38
5.10–5.20	144.4–147.2	3.00	1.36	21.10	9.58	12.05	5.47
5.20–5.30	147.2–150.1	3.00	1.36	21.50	9.76	12.25	5.56
5.30–5.40	150.1–152.9	3.00	1.36	21.90	9.95	12.45	5.65
5.40–5.50	152.9–155.7	3.00	1.36	22.30	10.13	12.65	5.75
5.50–5.60	155.7–158.6	3.00	1.36	22.80	10.32	12.90	5.84
5.60–5.70	158.6–161.4	3.00	1.36	23.20	10.51	13.10	5.93
5.70–5.80	161.4–164.2	3.00	1.36	23.60	10.69	13.30	6.03
5.80–5.90	164.2–167.1	3.00	1.36	24.00	10.88	13.50	6.12
5.90–6.00	167.1–169.9	3.00	1.36	24.40	11.06	13.70	6.21
6.00–6.10	169.9–172.7	3.00	1.36	24.80	11.25	13.90	6.30
6.10–6.20	172.7–175.6	3.00	1.36	25.20	11.43	14.10	6.40
6.20–6.30	175.6–178.4	3.00	1.36	25.60	11.61	14.30	6.49

EXHIBIT A: MODIFIED TABLE 5.1—TEST LOAD SIZES—10 CFR 430, SUBPART B, APPENDIX J2—Continued

Container volume		Minimum load		Maximum load		Average load	
cu. ft. ≥ <	liter ≥ <	lb	kg	lb	kg	lb	kg
6.30–6.40	178.4–181.2	3.00	1.36	26.00	11.79	14.50	6.58
6.40–6.50	181.2–184.1	3.00	1.36	26.40	11.97	14.70	6.67
6.50–6.60	184.1–186.9	3.00	1.36	26.90	12.20	15.10	6.85
6.60–6.70	186.9–189.7	3.00	1.36	27.30	12.38	15.30	6.94
6.70–6.80	189.7–192.6	3.00	1.36	27.70	12.56	15.50	7.03
6.80–6.90	192.6–195.4	3.00	1.36	28.10	12.75	15.70	7.12
6.90–7.00	195.4–198.2	3.00	1.36	28.50	12.93	15.90	7.21
7.00–7.10	198.2–201.0	3.00	1.36	28.90	13.11	16.10	7.30
7.10–7.20	201.0–203.9	3.00	1.36	29.30	13.29	16.30	7.39
7.20–7.30	203.9–206.7	3.00	1.36	29.70	13.47	16.50	7.48
7.30–7.40	206.7–209.5	3.00	1.36	30.10	13.65	16.70	7.57
7.40–7.50	209.5–212.4	3.00	1.36	30.50	13.83	16.90	7.67
7.50–7.60	212.4–215.2	3.00	1.36	31.00	14.06	17.30	7.85
7.60–7.70	215.2–218.0	3.00	1.36	31.40	14.24	17.50	7.94
7.70–7.80	218.0–220.9	3.00	1.36	31.80	14.42	17.70	8.03
7.80–7.90	220.9–223.7	3.00	1.36	32.20	14.61	17.90	8.12
7.90–8.00	223.7–226.5	3.00	1.36	32.60	14.79	18.10	8.21

Exhibit B: Notice to Manufacturers

November 9, 2015

Alliance Laundry Systems, LLC
Attn: Andrew Huerth
PO Box 990
Shepard Street Ripon, WI 54971

Association of Home Appliance Manufacturers
Attn: Jennifer Cleary
1111 19th Street NW., Suite 402
Washington, DC 20036

Arcelik A.S.
Attn: Salih Zeki Bugay
125 W Tremont Ave #1134
Charlotte, NC 28203

Asko Appliances AB
Attn: Jonas Lidberg
Socerbruksgatan 3SE–531 40
Lidköping, Sweden

Avanti Products
10880 NW 30th Street
Miami, FL 33172

Bosch Home Appliances Corporation
Attn: Michelle Buranday
1901 Main St
Irvine, CA 92614

Danby Products, Inc.
PO Box 669
Findlay, OH 45839–0669

Electrolux Home Products
Attn: George Hawranko
10200 David Taylor Dr Rm TKY435
Charlotte, NC 28262

Fisher & Paykel Appliances Inc.
Attn: Laurence Mawhinney
695 Town Center Dr Ste 180
Costa Mesa, CA 92626

General Electric Company
Attn: Earl F. Jones
4000 Buechel Bank Road AP2–225
Louisville, KY 40225

Haier America
Attn: Michelangelo Troisi
1800 Valley Rd
Wayne, NJ 07470

LG Electronics USA, Inc.
Attn: John I. Taylor
2000 Millbrook Dr
Lincolnshire, IL 60069

Miele, Inc.
Attn: Steve Polinski
9 Independence Way
Princeton, NJ 08450

Samsung Electronics America, Inc.
Attn: Doug Czerwonka
85 Challenger Rd
Ridgefield Park, NJ 07660

Versonel
180 Earland Drive
Building #8
New Holland, PA 17557

Re: *Petition for Waiver & Application for Interim Waiver Regarding Measurement of Energy Consumption of Residential Clothes Washers, Using 10 CFR part 430, subpart B, Appendix J2*

Dear Madam or Sir:

Whirlpool Corporation (''Whirlpool'') is submitting the enclosed Petition for Waiver and Application for Interim Waiver (pursuant to 10 CFR 430.27) to the US Department of Energy (''DOE''), relating to the Test Procedures for energy and water consumption of clothes washers. This letter provides notice to other known manufacturers of similar products. The DOE Assistant Secretary for Conservation and Renewable Energy will receive and consider timely written comments on the Petition for Waiver and Application for Interim Waiver. Any manufacturer submitting written comments should provide a copy to Whirlpool Corporation at the address shown below.

Whirlpool Corporation
Attn: Sean Southard
Senior Analyst, Regulatory Affairs
2000 M–63 North, MD1604
Benton Harbor, MI 49022
Fax: 269/923–7258
Email: *sean_m_southard@whirlpool.com*

[FR Doc. 2015–31623 Filed 12–15–15; 8:45 am]

BILLING CODE 6450–01–P

DEPARTMENT OF ENERGY

Office of Energy Efficiency and Renewable Energy

Guidance and Application for Hydroelectric Incentive Payments

AGENCY: Wind and Water Power Program, Office of Energy Efficiency and Renewable Energy, Department of Energy.

ACTION: Notice of availability of guidance and open application period.

SUMMARY: The U.S. Department of Energy (DOE) is publishing Guidance for the Energy Policy Act of 2005 Section 242 Program. The guidance describes the hydroelectric incentive payment requirements and explains the type of information that owners or authorized operators of qualified hydroelectric facilities can provide DOE when applying for hydroelectric incentive payments. This incentive is available for electric energy generated and sold for a specified 10-year period as authorized under section 242 of the Energy Policy Act of 2005. In Congressional appropriations for Federal fiscal year 2015, DOE received funds to support this hydroelectric incentive program for the first time. At

this time, DOE is only accepting applications from owners and authorized operators of qualified hydroelectric facilities for hydroelectricity generated and sold in calendar year 2014.

DATES: DOE is currently accepting applications from December 16, 2015 through February 1, 2016. Applications must be sent to *hydroincentive@ee.doe.gov* by midnight EDT, February 1, 2016, or they will not be considered timely filed for calendar year 2014 incentive payments.

ADDRESSES: DOE's guidance is available at: *http://energy.gov/eere/water/water-power-program.*

Written correspondence may be sent to the Office of Energy Efficiency and Renewable Energy (EE–4), by email at *hydroincentive@ee.doe.gov.*

FOR FURTHER INFORMATION CONTACT: Requests for additional information should be directed to Mr. Steven Lindenberg, Office of Energy Efficiency and Renewable Energy (EE–4), U.S. Department of Energy, 1000 Independence Avenue SW, Washington, DC 20585–0121, (202) 586–2783, *hydroincentive@ee.doe.gov. Electronic communications are recommended for correspondence and required for submission of application information.*

SUPPLEMENTARY INFORMATION: In the Energy Policy Act of 2005 (EPAct 2005; Pub. L. 109–58), Congress established a new program to support the expansion of hydropower energy development at existing dams and impoundments through an incentive payment procedure. Under section 242 of EPAct 2005, the Secretary of Energy is directed to provide incentive payments to the owner or authorized operator of qualified hydroelectric facilities for electric energy generated and sold by a qualified hydroelectric facility for a specified 10-year period (See 42 U.S.C. 15881). The conference report to the law that made appropriations for Fiscal Year 2015 includes $3,960,000 for conventional hydropower under section 242 of EPAct 2005.

DOE developed and announced guidance in January 2015 describing the application process and the information necessary for DOE to make a determination of eligibility under section 242. *See* 80 FR 2685 (January 20, 2015). The guidance announced today includes certain minor modifications to the January 2015 guidance based on DOE's experience with the January 2015 application process. Specifically, DOE is amending some portions of the guidance document to more precisely describe what types of production are considered ''new'' production and the information necessary to demonstrate adequate metering. The final guidance is available at: *http://energy.gov/eere/water/water-power-program.* Each application will be reviewed based on the guidance. DOE notes that applicants that received payments for calendar year 2013 and that are eligible for calendar year 2014 payments must still submit a full calendar year 2014 application.

When submitting information to DOE for the Section 242 program, it is recommended that applicants carefully read and review the complete content of the Guidance for this process. When reviewing applications, DOE may corroborate the information provided with information that DOE finds through FERC e-filings, contact with power off-taker, and other due diligence measures carried out by reviewing officials. DOE may require the applicant to conduct and submit an independent audit at its own expense, or DOE may conduct an audit to verify the number of kilowatt-hours claimed to have been generated and sold by the qualified hydroelectric facility and for which an incentive payment has been requested or made.

Issued in Washington, DC, on December 10, 2015.

Douglas Hollett,

Deputy Assistant Secretary for Renewable Power, Energy Efficiency and Renewable Energy.

[FR Doc. 2015–31618 Filed 12–15–15; 8:45 am]

BILLING CODE 6450–01–P

DEPARTMENT OF ENERGY

Federal Energy Regulatory Commission

[Docket No. CP15–150–000]

Columbia Gas Transmission, LLC ; Notice of Schedule for Environmental Review of the Proposed Line WB2VA Integrity Project

On April 2, 2015, Columbia Gas Transmission, LLC (Columbia) filed an application in Docket No. CP15–150–000, requesting authorization and a Certificate of Public Convenience and Necessity pursuant to section 7(b) and 7(c) of the Natural Gas Act, to abandon, modify, and install certain natural gas pipeline facilities. The proposed project is known as the Line WB2VA Integrity Project. The purpose of the project is to allow the use of modern inline inspection devices and upgrade pipeline segments in compliance with U.S. Department of Transportation safety standards.

On April 15, 2015, the Federal Energy Regulatory Commission (Commission or FERC) issued its *Notice of Application* for the project. Among other things, that notice alerted agencies issuing federal authorizations of the requirement to complete all necessary reviews and to reach a final decision on a request for a federal authorization within 90 days of the date of issuance of the Commission staff's Environmental Assessment (EA) for the project. This instant notice identifies the FERC staff's planned schedule for the completion of the EA for the project.

Schedule for Environmental Review

Issuance of EA—January 28, 2016.
90-day Federal Authorization Decision Deadline—April 27, 2016.

If a schedule change becomes necessary, additional notice will be provided so that the relevant agencies are kept informed of the project's progress.

Project Description

The Line WB2VA Integrity Project would include modifications to Columbia's existing facilities at 17 sites in Hardy County, West Virginia, and Shenandoah, Page, Rockingham, and Greene Counties, Virginia. Proposed modifications include installation of pig launchers and receivers; replacement of short sections of existing pipeline, mainline valves, and other appurtenant facilities; and abandonment of two existing 20-inch-diameter pipelines beneath the South Fork of the Shenandoah River that would be replaced with a new 24-inch-diameter pipeline.

Background

On May 14, 2015, we issued a Notice of Intent to Prepare an Environmental Assessment for the Proposed WB2VA Integrity Project and Request for Comments on Environmental Issues (NOI). The NOI was published in the **Federal Register** and was mailed to 163 interested parties, including federal, state, and local government representatives and agencies; elected officials; affected landowners; environmental and public interest groups; potentially interested Native American tribes; other interested parties; and local libraries and newspapers.

In response to the NOI, the Commission received comments from non-government organizations, and federal and state agencies. The primary environmental issues raised by the commentors include: air quality, steep slopes and slope-prone soils, recreation, public lands, karst topography, threatened and endangered species,

wetlands and waterbodies, cumulative impacts, and alternatives.

The U.S. Army Corps of Engineers, West Virginia Department of Natural Resources, and West Virginia Department of Environmental Protection are cooperating agencies for preparation of the EA.

Additional Information

In order to receive notification of the issuance of the EA and to keep track of all formal issuances and submittals, the Commission offers a free service called eSubscription. This can reduce the amount of time you spend researching proceedings by automatically providing you with notification of these filings, document summaries, and direct links to the documents. Go to *www.ferc.gov/docs-filing/esubscription.asp.*

Additional information about the project is available from the Commission's Office of External Affairs at (866) 208–FERC or on the FERC Web site (*www.ferc.gov*). Using the ''eLibrary'' link, select ''General Search'' from the menu, enter the selected date range and ''Docket Number'' excluding the last three digits (*i.e.,* CP15–150), and follow the instructions. For assistance with eLibrary, the helpline can be reached at (866) 208–3676, TTY (202) 502–8659, or at *FERCOnlineSupport@ferc.gov.* The eLibrary link on the FERC Web site also provides access to the texts of formal documents issued by the Commission, such as orders, notices, and rule makings.

Dated: December 10, 2015.

Nathaniel J. Davis, Sr.,

Deputy Secretary.

[FR Doc. 2015–31609 Filed 12–15–15; 8:45 am]

BILLING CODE 6717–01–P

DEPARTMENT OF ENERGY

Federal Energy Regulatory Commission

Combined Notice of Filings #1

Take notice that the Commission received the following electric corporate filings:

Docket Numbers: EC16–48–000.

Applicants: Longview Power.

Description: Application of Longview Power, LLC for Authorizations Pursuant to Section 203 of the Federal Power Act and Requests for Expedited Action and Waivers of Certain Filing Requirements.

Filed Date: 12/9/15.

Accession Number: 20151209–5168.

Comments Due: 5 p.m. ET 12/30/15.

Take notice that the Commission received the following electric rate filings:

Docket Numbers: ER15–1045–002.

Applicants: Pilot Hill Wind, LLC.

Description: Notice of Non-Material Change in Status of Pilot Hill Wind, LLC.

Filed Date: 12/9/15.

Accession Number: 20151209–5174.

Comments Due: 5 p.m. ET 12/30/15.

Docket Numbers: ER16–341–000; ER16–343–000.

Applicants: RE Astoria LLC, RE Astoria 2 LLC.

Description: Clarification to November 17, 2015 RE Astoria LLC and November 18, 2015 RE Astoria 2 LLC tariff filings.

Filed Date: 11/24/15.

Accession Number: 20151125–5059.

Comments Due: 5 p.m. ET 12/21/15.

Docket Numbers: ER16–341–000; ER16–343–000.

Applicants: RE Astoria LLC, RE Astoria 2 LLC.

Description: Second Clarification to November 17, 2015 RE Astoria LLC and November 18, 2015 RE Astoria 2 LLC tariff filings.

Filed Date: 12/4/15.

Accession Number: 20151204–5285.

Comments Due: 5 p.m. ET 12/21/15.

Docket Numbers: ER16–490–000.

Applicants: Midcontinent Independent System Operator, Inc.

Description: § 205(d) Rate Filing: 2015–12–09_MISO–PJM JOA Eliminate $20M Project Threshold to be effective 2/8/2016.

Filed Date: 12/9/15.

Accession Number: 20151209–5114.

Comments Due: 5 p.m. ET 12/30/15.

Docket Numbers: ER16–491–000.

Applicants: Duke Energy Florida, LLC.

Description: § 205(d) Rate Filing: TEA Amended Firm PTP SA No. 140 to be effective 12/10/2015.

Filed Date: 12/9/15.

Accession Number: 20151209–5116.

Comments Due: 5 p.m. ET 12/30/15.

Docket Numbers: ER16–492–000.

Applicants: Wabash Valley Power Association, Inc.

Description: Application of Wabash Valley Power Association, Inc. for Approval to Establish a Regulatory Asset Related to Planned Early Retirements and Recovery of Such Costs through Formulary Rate Tariff.

Filed Date: 12/9/15.

Accession Number: 20151209–5167.

Comments Due: 5 p.m. ET 12/30/15.

Docket Numbers: ER16–493–000.

Applicants: Southwest Power Pool, Inc.

Description: § 205(d) Rate Filing: 1977R7 Nemaha-Marshall Electric Cooperative NITSA and NOA to be effective 12/1/2015.

Filed Date: 12/10/15.

Accession Number: 20151210–5046.

Comments Due: 5 p.m. ET 12/31/15.

Docket Numbers: ER16–494–000.

Applicants: MidAmerican Energy Company.

Description: § 205(d) Rate Filing: MidAmerican-Ameren Amended Trans Interconnection Agreement to be effective 12/31/9998.

Filed Date: 12/10/15.

Accession Number: 20151210–5051.

Comments Due: 5 p.m. ET 12/31/15.

Docket Numbers: ER16–495–000.

Applicants: Prairie Breeze Wind Energy LLC.

Description: § 205(d) Rate Filing: Filing of Amended Assignment, Co-Tenancy, and Shared Facilities Agreement to be effective 12/11/2015.

Filed Date: 12/10/15.

Accession Number: 20151210–5054.

Comments Due: 5 p.m. ET 12/31/15.

Take notice that the Commission received the following foreign utility company status filings:

Docket Numbers: FC16–1–000.

Applicants: Wind Service Sp. z.o.o.

Description: Self-Certification of Foreign Utility Company Status of Wind Service Sp. z.o.o.

Filed Date: 12/10/15.

Accession Number: 20151210–5080.

Comments Due: 5 p.m. ET 12/31/15.

The filings are accessible in the Commission's eLibrary system by clicking on the links or querying the docket number.

Any person desiring to intervene or protest in any of the above proceedings must file in accordance with Rules 211 and 214 of the Commission's Regulations (18 CFR 385.211 and 385.214) on or before 5:00 p.m. Eastern time on the specified comment date. Protests may be considered, but intervention is necessary to become a party to the proceeding.

eFiling is encouraged. More detailed information relating to filing requirements, interventions, protests, service, and qualifying facilities filings can be found at: *http://www.ferc.gov/docs-filing/efiling/filing-req.pdf.* For other information, call (866) 208–3676 (toll free). For TTY, call (202) 502–8659.

Dated: December 10, 2015.

Nathaniel J. Davis, Sr.,

Deputy Secretary.

[FR Doc. 2015–31606 Filed 12–15–15; 8:45 am]

BILLING CODE 6717–01–P

DEPARTMENT OF ENERGY

Federal Energy Regulatory Commission

[14697–000]

Advanced Hydropower, Inc.; Notice of Preliminary Permit Application Accepted for Filing and Soliciting Comments, Motions To Intervene, and Competing Applications

On August 3, 2015, Advanced Hydropower, Inc. filed an application for a preliminary permit, pursuant to section 4(f) of the Federal Power Act (FPA), proposing to study the feasibility of the McNary Dam Advanced Hydropower Project (McNary Dam Project or project) to be located at U.S. Corps of Engineers' McNary Dam near Plymouth in Benton County, Washington and Umatilla in Umatilla County, Oregon. The sole purpose of a preliminary permit, if issued, is to grant the permit holder priority to file a license application during the permit term. A preliminary permit does not authorize the permit holder to perform any land-disturbing activities or otherwise enter upon lands or waters owned by others without the owners' express permission.

The proposed project would utilize flows at the existing McNary Dam, and would consist of the following new features: (1) A 52-foot-wide, 40-foot-high gated intake located on the upstream side of McNary Dam; (2) a 32-foot-wide, 34-foot-high, 234-foot-long concrete penstock installed through McNary Dam; (3) a 34-megawatt vertical shaft Alden turbine; (4) a draft tube discharging flows to the existing McNary Dam tailrace; (5) a 1.24-mile-long, 13.8- or 23-kilovolt transmission line interconnecting with the existing McNary Dam switchyard; and (6) appurtenant facilities. The estimated annual generation of the McNary Dam Project would be 148.92 gigawatt-hours.

Applicant Contact: Mr. Kurt Ross, Advanced Hydropower, Inc., 925 Fairgrounds Road, Goldendale, Washington 98620; phone: (509) 773–5650.

FERC Contact: Sean O'Neill; phone: (202) 502–6462.

Deadline for filing comments, motions to intervene, competing applications (without notices of intent), or notices of intent to file competing applications: 60 days from the issuance of this notice. Competing applications and notices of intent must meet the requirements of 18 CFR 4.36.

The Commission strongly encourages electronic filing. Please file comments, motions to intervene, notices of intent, and competing applications using the Commission's eFiling system at *http://www.ferc.gov/docs-filing/efiling.asp.* Commenters can submit brief comments up to 6,000 characters, without prior registration, using the eComment system at *http://www.ferc.gov/docs-filing/ecomment.asp.* You must include your name and contact information at the end of your comments. For assistance, please contact FERC Online Support at *FERCOnlineSupport@ferc.gov,* (866) 208–3676 (toll free), or (202) 502–8659 (TTY). In lieu of electronic filing, please send a paper copy to: Secretary, Federal Energy Regulatory Commission, 888 First Street NE., Washington, DC 20426. The first page of any filing should include docket number P–14697–000.

More information about this project, including a copy of the application, can be viewed or printed on the ''eLibrary'' link of Commission's Web site at *http://www.ferc.gov/docs-filing/elibrary.asp.* Enter the docket number (P–14697) in the docket number field to access the document. For assistance, contact FERC Online Support.

Dated: December 10, 2015.

Nathaniel J. Davis, Sr.,

Deputy Secretary.

[FR Doc. 2015–31612 Filed 12–15–15; 8:45 am]

BILLING CODE 6717–01–P

DEPARTMENT OF ENERGY

Federal Energy Regulatory Commission

Combined Notice of Filings

Take notice that the Commission has received the following Natural Gas Pipeline Rate and Refund Report filings:

Filing Instituting Proceedings

Docket Numbers: RP15–1257–000.
Applicants: ANR Pipeline Company.
Description: Informational Filing, submitted out of time, in compliance with October 22, 2015 Letter Order of ANR Pipeline Company under RP15–1257.
Filed Date: 12/9/15.
Accession Number: 20151209–5021.
Comments Due: 5 p.m. ET 12/21/15.

Docket Numbers: RP16–291–000.
Applicants: Alliance Pipeline L.P.
Description: § 4(d) rate filing per 154.204: J. Aron Contract Amendment to be effective 12/1/2015.
Filed Date: 12/9/15.
Accession Number: 20151209–5004.
Comments Due: 5 p.m. ET 12/21/15.

Docket Numbers: RP16–291–000.
Applicants: Alliance Pipeline L.P.
Description: § 4(d) rate filing per 154.204: J. Aron Contract Amendment to be effective 12/1/2015.
Filed Date: 12/9/15.
Accession Number: 20151209–5004.
Comments Due: 5 p.m. ET 12/21/15.

Docket Numbers: RP16–292–000.
Applicants: Alliance Pipeline L.P.
Description: Compliance filing per 154.203: Reinstate AOS to be effective 12/1/2015.
Filed Date: 12/9/15.
Accession Number: 20151209–5071.
Comments Due: 5 p.m. ET 12/21/15.

Docket Numbers: RP16–293–000.
Applicants: Equitrans, L.P.
Description: § 4(d) rate filing per 154.204: Update LPS and FLPS Form of Service Agreements to be effective 1/9/2016.
Filed Date: 12/9/15.
Accession Number: 20151209–5077.
Comments Due: 5 p.m. ET 12/21/15.

Docket Numbers: RP16–294–000.
Applicants: Southern Star Central Gas Pipeline, Inc.
Description: Compliance filing per 154.203: Capacity Release Waiver Filing to be effective N/A.
Filed Date: 12/9/15.
Accession Number: 20151209–5120.
Comments Due: 5 p.m. ET 12/21/15.

Docket Numbers: RP16–295–000.
Applicants: Eastern Shore Natural Gas Company.
Description: § 4(d) rate filing per 154.204: Filing of Negotiated Rate Agreement to be effective 11/1/2015.
Filed Date: 12/9/15.
Accession Number: 20151209–5121.
Comments Due: 5 p.m. ET 12/21/15.

Docket Numbers: CP16–26–000.
Applicants: MoGas Pipeline LLC.
Description: Abandonment Authority and for a Certificate of Public Convenience.
Filed Date: 11/30/2015.
Accession Number: 20151130–5452.
Comments Due: 5 p.m. ET 12/28/2015.

Docket Numbers: PR16–8–000.
Applicants: Washington 10 Storage Corporation.
Description: Tariff filing per 284.123(e)/.224: Update of Statement of Operating Conditions to be effective 12/8/2015.
Filed Date: 12/7/15.
Accession Number: 201512075094.
Comments/Protests Due: 5 p.m. ET 12/28/15.

Docket Numbers: PR16–5–000.
Applicants: Southern California Gas Company.
Description: Tariff filing per 284.123(b)(1)/.: New Rate Filing to be effective 12/1/2015.
Filed Date: 12/2/15.
Accession Number: 201512025225.
Comments/Protests Due: 5 p.m. ET 12/23/15.

Docket Numbers: PR16–6–000.
Applicants: Southern California Gas Company.
Description: Tariff filing per 284.123(g)/.224: Cancellation of FERC Section 284.224 Service Tariff—Clone—Clone to be effective 12/3/2015.
Filed Date: 12/3/2015.
Accession Number: 201512035003.
Comments Due: 5 p.m. ET 12/24/15.
284.123(g) Protests Due: 5 p.m. ET 2/1/16.
Docket Numbers: PR16–7–000.
Applicants: Columbia Gas of Maryland, Inc.
Description: Tariff filing per 284.123(b)(1)/.: Revised SOC to be effective 12/4/2015.
Filed Date: 12/4/15.
Accession Number: 201512045120.
Comments/Protests Due: 5 p.m. ET 12/28/15.

Any person desiring to intervene or protest in any of the above proceedings must file in accordance with Rules 211 and 214 of the Commission's Regulations (18 CFR 385.211 and § 385.214) on or before 5:00 p.m. Eastern time on the specified comment date. Protests may be considered, but intervention is necessary to become a party to the proceeding.

Filings in Existing Proceedings

Docket Numbers: RP15–1278–001.
Applicants: Maritimes & Northeast Pipeline, L.L.C.
Description: Report Filing: MNUS December 10, 2015, Errata Filing to be effective N/A.
Filed Date: 12/10/15.
Accession Number: 20151210–5069.
Comments Due: 5 p.m. ET 12/22/15.
Docket Numbers: RP15–1279–001.
Applicants: Texas Eastern Transmission, LP.
Description: Report Filing: TETLP December 10, 2015, Errata Filing to be effective N/A.
Filed Date: 12/10/15.
Accession Number: 20151210–5073.
Comments Due: 5 p.m. ET 12/22/15.

The filings are accessible in the Commission's eLibrary system by clicking on the links or querying the docket number.

Any person desiring to intervene or protest in any of the above proceedings must file in accordance with Rules 211 and 214 of the Commission's Regulations (18 CFR 385.211 and § 385.214) on or before 5:00 p.m. Eastern time on the specified comment date. Protests may be considered, but intervention is necessary to become a party to the proceeding.

eFiling is encouraged. More detailed information relating to filing requirements, interventions, protests, service, and qualifying facilities filings can be found at: *http://www.ferc.gov/docs-filing/efiling/filing-req.pdf.* For other information, call (866) 208–3676 (toll free). For TTY, call (202) 502–8659.

December 10, 2015.

Nathaniel J. Davis, Sr.,

Deputy Secretary.

[FR Doc. 2015–31617 Filed 12–15–15; 8:45 am]

BILLING CODE 6717–01–P

DEPARTMENT OF ENERGY

Federal Energy Regulatory Commission

[Docket No. EL16–20–000]

Grid Assurance LLC; Notice of Petition for Declaratory Order

Take notice that on December 4, 2015, pursuant to Rule 207(a)(2) of the Commission's Rules of Practice and Procedure of the Federal Energy Regulatory Commission's (Commission), 18 CFR 385.207(a)(2)(2015), Grid Assurance LLC filed a petition for declaratory order making regulatory findings for the benefit of the prospective subscribers to the spare transmission equipment service that will be offered by Grid Assurance. Grid Assurance seeks to address a critical national security need—enhancing the resiliency of the bulk power system in the event of a catastrophic event such as a natural disaster or an attack, by making critical replacement equipment for the transmission grid readily available to transmission owners in the United States and Canada, as more fully explained in the petition.

Any person desiring to intervene or to protest in this proceeding must file in accordance with Rules 211 and 214 of the Commission's Rules of Practice and Procedure (18 CFR 385.211 and 385.214) on or before 5:00 p.m. Eastern time on the specified comment date. Protests will be considered by the Commission in determining the appropriate action to be taken, but will not serve to make protestants parties to the proceeding. Any person wishing to become a party must file a notice of intervention or motion to intervene, as appropriate. Such notices, motions, or protests must be filed on or before the comment date. Anyone filing a motion to intervene or protest must serve a copy of that document on the Petitioner.

The Commission encourages electronic submission of protests and interventions in lieu of paper, using the FERC Online links at *http://www.ferc.gov.* To facilitate electronic service, persons with Internet access who will eFile a document and/or be listed as a contact for an intervenor must create and validate an eRegistration account using the eRegistration link. Select the eFiling link to log on and submit the intervention or protests.

Persons unable to file electronically should submit an original and 5 copies of the intervention or protest to the Federal Energy Regulatory Commission, 888 First Street NE., Washington, DC 20426.

The filings in the above proceeding are accessible in the Commission's eLibrary system by clicking on the appropriate link in the above list. They are also available for review in the Commission's Public Reference Room in Washington, DC. There is an eSubscription link on the Web site that enables subscribers to receive email notification when a document is added to a subscribed docket(s). For assistance with any FERC Online service, please email *FERCOnlineSupport@ferc.gov.or* call (866) 208–3676 (toll free). For TTY, call (202) 502–8659.

Comment Date: 5:00 p.m. Eastern time on December 28, 2015.

Dated: December 10, 2015.

Nathaniel J. Davis, Sr.,

Deputy Secretary.

[FR Doc. 2015–31610 Filed 12–15–15; 8:45 am]

BILLING CODE 6717–01–P

DEPARTMENT OF ENERGY

Federal Energy Regulatory Commission

Combined Notice of Filings #2

Take notice that the Commission received the following electric rate filings:

Docket Numbers: ER16–341–000*; ER16–343–000.*
Applicants: RE Astoria LLC, RE Astoria 2 LLC.
Description: Third Clarification to November 17, 2015 RE Astoria LLC and November 18, 2015 RE Astoria 2 LLC tariff filings.
Filed Date: 12/9/15.
Accession Number: 20151209–5046.
Comments Due: 5 p.m. ET 12/21/15.
Docket Numbers: ER16–496–000.
Applicants: Prairie Breeze Wind Energy II LLC.
Description: § 205(d) Rate Filing: Filing of Amended Assignment, Co-Tenancy, and Shared Facilities Agreement to be effective 12/11/2015.
Filed Date: 12/10/15.
Accession Number: 20151210–5059.
Comments Due: 5 p.m. ET 12/31/15.

Docket Numbers: ER16–497–000.
Applicants: Prairie Breeze Wind Energy III LLC.
Description: § 205(d) Rate Filing: Filing of Amended Assignment, Co-Tenancy, and Shared Facilities Agreement to be effective 12/11/2015.
Filed Date: 12/10/15.
Accession Number: 20151210–5062.
Comments Due: 5 p.m. ET 12/31/15.
Docket Numbers: ER16–498–000.
Applicants: RE Mustang LLC.
Description: Baseline eTariff Filing: Application for Market Base Rate to be effective 2/8/2016.
Filed Date: 12/10/15.
Accession Number: 20151210–5064.
Comments Due: 5 p.m. ET 12/31/15.
Docket Numbers: ER16–499–000.
Applicants: RE Mustang 3 LLC.
Description: Baseline eTariff Filing: Application for Market Based Rate to be effective 2/8/2016.
Filed Date: 12/10/15.
Accession Number: 20151210–5066.
Comments Due: 5 p.m. ET 12/31/15.
Docket Numbers: ER16–500–000.
Applicants: RE Mustang 4 LLC.
Description: Baseline eTariff Filing: Application for Market Based Rate to be effective 2/8/2016.
Filed Date: 12/10/15.
Accession Number: 20151210–5067.
Comments Due: 5 p.m. ET 12/31/15.
Docket Numbers: ER16–501–000.
Applicants: Southern California Edison Company.
Description: § 205(d) Rate Filing: Amendment to Extend Terms of Eldorado Co-Tenancy and Communication Agreement to be effective 1/1/2016.
Filed Date: 12/10/15.
Accession Number: 20151210–5077.
Comments Due: 5 p.m. ET 12/31/15.
Docket Numbers: ER16–502–000.
Applicants: Arizona Public Service Company.
Description: § 205(d) Rate Filing: Service Agreement No. 193—Amendment 4, ANPP Hassayampa Switchyard to be effective 11/10/2015.
Filed Date: 12/10/15.
Accession Number: 20151210–5124.
Comments Due: 5 p.m. ET 12/31/15.
Docket Numbers: ER16–503–000.
Applicants: Duke Energy Florida, LLC.
Description: § 205(d) Rate Filing: City of Quincy NITSA–NOA SA No. 153 to be effective 1/1/2016.
Filed Date: 12/10/15.
Accession Number: 20151210–5151.
Comments Due: 5 p.m. ET 12/31/15.
Docket Numbers: ER16–504–000.
Applicants: Talen Energy Marketing, LLC.
Description: Informational Filing of Talen Energy Marketing, LLC Pursuant to Schedule 2 of the PJM Interconnection, L.L.C. Open-Access Tariff.
Filed Date: 10/30/15.
Accession Number: 20151030–5336.
Comments Due: 5 p.m. ET 12/31/15.

Take notice that the Commission received the following electric securities filings:
Docket Numbers: ES16–9–000
Applicants: New York State Electric & Gas Corporation.
Description: Application for Authorization to Issue Short Term Debt of New York State Electric & Gas Corporation.
Filed Date: 12/10/15.
Accession Number: 20151210–5146.
Comments Due: 5 p.m. ET 12/31/15.

The filings are accessible in the Commission's eLibrary system by clicking on the links or querying the docket number.

Any person desiring to intervene or protest in any of the above proceedings must file in accordance with Rules 211 and 214 of the Commission's Regulations (18 CFR 385.211 and 385.214) on or before 5:00 p.m. Eastern time on the specified comment date. Protests may be considered, but intervention is necessary to become a party to the proceeding.

eFiling is encouraged. More detailed information relating to filing requirements, interventions, protests, service, and qualifying facilities filings can be found at: *http://www.ferc.gov/docs-filing/efiling/filing-req.pdf.* For other information, call (866) 208–3676 (toll free). For TTY, call (202) 502–8659.

Dated: December 10, 2015.

Nathaniel J. Davis, Sr.,

Deputy Secretary.

[FR Doc. 2015–31607 Filed 12–15–15; 8:45 am]

BILLING CODE 6717–01–P

DEPARTMENT OF ENERGY

Federal Energy Regulatory Commission

Combined Notice of Filings

Take notice that the Commission has received the following Natural Gas Pipeline Rate and Refund Report filings:

Filing Instituting Proceedings

Docket Numbers: RP16–274–000.
Applicants: Equitrans, L.P.
Description: § 4(d) rate filing per 154.204: Storage Injections and Withdrawals to be effective 1/1/2016.
Filed Date: 12/2/15.
Accession Number: 20151202–5000.
Comments Due: 5 p.m. ET 12/14/15.
Docket Numbers: RP16–275–000.
Applicants: Gulf South Pipeline Company, LP.
Description: § 4(d) rate filing per 154.204: Rate Case Settlement Amendment Filing 7 to be effective 12/1/2015.
Filed Date: 12/2/15.
Accession Number: 20151202–5033.
Comments Due: 5 p.m. ET 12/14/15.
Docket Numbers: RP16–276–000.
Applicants: Stagecoach Pipeline & Storage Company LL.
Description: Compliance filing per 154.203: Cost and Revenue Study to be effective N/A.
Filed Date: 12/2/15.
Accession Number: 20151202–5158.
Comments Due: 5 p.m. ET 12/14/15.
Docket Numbers: RP16–277–000.
Applicants: Enable Mississippi River Transmission, L.
Description: § 4(d) rate filing per 154.204: Negotiated Rate Filing to Amend LER 5680's Attachment A_12_3_15 to be effective 12/3/2015.
Filed Date: 12/3/15.
Accession Number: 20151203–5048.
Comments Due: 5 p.m. ET 12/15/15.
Docket Numbers: RP16–278–000.
Applicants: Cheyenne Plains Gas Pipeline Company, L.
Description: § 4(d) rate filing per 154.601: Non-Conforming Negotiated Rate Agreement Update (EnCana) to be effective 12/7/2015.
Filed Date: 12/4/15.
Accession Number: 20151204–5133.
Comments Due: 5 p.m. ET 12/16/15.
Docket Numbers: RP16–279–000.
Applicants: Dauphin Island Gathering Partners.
Description: § 4(d) rate filing per 154.204: Texas Eastern Lease Charge Removal to be effective 1/1/2016.
Filed Date: 12/4/15.
Accession Number: 20151204–5141.
Comments Due: 5 p.m. ET 12/16/15.
Docket Numbers: RP16–280–000.
Applicants: Northern Natural Gas Company.
Description: § 4(d) rate filing per 154.204: 20151204 Negotiated Rates to be effective 12/5/2015.
Filed Date: 12/4/15.
Accession Number: 20151204–5232.
Comments Due: 5 p.m. ET 12/16/15.
Docket Numbers: RP16–281–000.
Applicants: Gulf South Pipeline Company, LP.
Description: § 4(d) rate filing per 154.204: Cap Rel Neg Rate Agmt (Encana 37663 to BP 45524) to be effective 12/1/2015.
Filed Date: 12/7/15.
Accession Number: 20151207–5067.

Comments Due: 5 p.m. ET 12/21/15.

Docket Numbers: RP16–282–000.

Applicants: Gulf South Pipeline Company, LP.

Description: § 4(d) rate filing per 154.204: Cap Rel Neg Rate Agmt (QEP 37657 to BP 45523) to be effective 12/1/2015.

Filed Date: 12/7/15.

Accession Number: 20151207–5068.

Comments Due: 5 p.m. ET 12/21/15.

Docket Numbers: RP16–283–000.

Applicants: Gulf South Pipeline Company, LP.

Description: § 4(d) rate filing per 154.204: Cap Rel Neg Rate Agmts (EOG 34687 to Sequent 45550 and Trans LA 45585) to be effective 12/1/2015.

Filed Date: 12/7/15.

Accession Number: 20151207–5070.

Comments Due: 5 p.m. ET 12/21/15.

Docket Numbers: RP16–284–000.

Applicants: Gulf South Pipeline Company, LP.

Description: § 4(d) rate filing per 154.204: Cap Rel Neg Rate Agmts (Atlanta 8438 to various eff 12–1–15) to be effective 12/1/2015.

Filed Date: 12/7/15.

Accession Number: 20151207–5071.

Comments Due: 5 p.m. ET 12/21/15.

Docket Numbers: RP16–285–000.

Applicants: Gulf South Pipeline Company, LP.

Description: § 4(d) rate filing per 154.204: Cap Rel Neg Rate Agmts (Petrohawk 41455 to Texla 45582 and Sequent 45584) to be effective 12/1/2015.

Filed Date: 12/7/15.

Accession Number: 20151207–5072.

Comments Due: 5 p.m. ET 12/21/15.

Docket Numbers: RP16–286–000.

Applicants: Enable Gas Transmission, LLC.

Description: § 4(d) rate filing per 154.204: Negotiated Rate Filing-Thunderbird 1010446 to be effective 12/14/2015.

Filed Date: 12/8/15.

Accession Number: 20151208–5069.

Comments Due: 5 p.m. ET 12/21/15.

Docket Numbers: RP16–287–000.

Applicants: Stagecoach Pipeline & Storage Company LL.

Description: Compliance filing per 154.203: Stagecoach Pipeline & Storage Co. LLC—Compliance with RP15–1218 Order to be effective 1/8/2016.

Filed Date: 12/8/15.

Accession Number: 20151208–5071.

Comments Due: 5 p.m. ET 12/21/15.

Docket Numbers: RP16–288–000.

Applicants: Millennium Pipeline Company, LLC.

Description: § 4(d) rate filing per 154.204: Negotiated Rate Service Agreement—Columbia 165033 to be effective 12/1/2015.

Filed Date: 12/8/15.

Accession Number: 20151208–5152.

Comments Due: 5 p.m. ET 12/21/15.

Docket Numbers: RP16–289–000.

Applicants: Alliance Pipeline L.P.

Description: § 4(d) rate filing per 154.204: Correct BP Name to be effective 12/1/2015.

Filed Date: 12/8/15.

Accession Number: 20151208–5154.

Comments Due: 5 p.m. ET 12/21/15.

Docket Numbers: RP16–290–000.

Applicants: Dominion Transmission, Inc.

Description: § 4(d) rate filing per 154.204: DTI—December 8, 2015 Administrative Changes to be effective 1/8/2016.

Filed Date: 12/8/15.

Accession Number: 20151208–5155.

Comments Due: 5 p.m. ET 12/21/15.

Docket Numbers: RP16–291–000.

Applicants: Alliance Pipeline L.P.

Description: § 4(d) rate filing per 154.204: J. Aron Contract Amendment to be effective 12/1/2015.

Filed Date: 12/9/15.

Accession Number: 20151209–5004.

Comments Due: 5 p.m. ET 12/21/15.

Any person desiring to intervene or protest in any of the above proceedings must file in accordance with Rules 211 and 214 of the Commission's Regulations (18 CFR 385.211 and § 385.214) on or before 5:00 p.m. Eastern time on the specified comment date. Protests may be considered, but intervention is necessary to become a party to the proceeding.

Filings In Existing Proceedings

Docket Numbers: RP16–37–001.

Applicants: Columbia Gas Transmission, LLC.

Description: Compliance filing per 154.203: Negotiated & Non-Conf ESE Compliance Filing—NJNG to be effective 11/1/2015.

Filed Date: 12/2/15.

Accession Number: 20151202–5161.

Comments Due: 5 p.m. ET 12/14/15.

Docket Numbers: RP16–224–001.

Applicants: Tennessee Gas Pipeline Company, L.L.C.

Description: Compliance filing per 154.203: Cashout Report 2014–2015-Revised Appendix A to be effective N/A.

Filed Date: 12/7/15.

Accession Number: 20151207–5115.

Comments Due: 5 p.m. ET 12/21/15.

The filings are accessible in the Commission's eLibrary system by clicking on the links or querying the docket number.

Any person desiring to intervene or protest in any of the above proceedings must file in accordance with Rules 211 and 214 of the Commission's Regulations (18 CFR 385.211 and § 385.214) on or before 5:00 p.m. Eastern time on the specified comment date. Protests may be considered, but intervention is necessary to become a party to the proceeding.

eFiling is encouraged. More detailed information relating to filing requirements, interventions, protests, service, and qualifying facilities filings can be found at: *http://www.ferc.gov/docs-filing/efiling/filing-req.pdf.* For other information, call (866) 208–3676 (toll free). For TTY, call (202) 502–8659.

Dated: December 9, 2015.

Nathaniel J. Davis, Sr.,

Deputy Secretary.

[FR Doc. 2015–31608 Filed 12–15–15; 8:45 am]

BILLING CODE 6717–01–P

DEPARTMENT OF ENERGY

Federal Energy Regulatory Commission

Notice of Commission Staff Attendance

The Federal Energy Regulatory Commission (Commission) hereby gives notice that members of the Commission's staff may attend the following meeting related to the transmission planning activities of the Southeastern Regional Transmission Planning (SERTP) Process.

The SERTP Process Fourth Quarter Meeting.

December 15, 2015 10:00 a.m.–2:00 p.m. (Eastern Time)

The above-referenced meeting will be via web conference.

The above-referenced meeting is open to stakeholders.

Further information may be found at: *www.southeasternrtp.com.*

The discussions at the meeting described above may address matters at issue in the following proceedings:

Docket Nos. ER13–1928, et al., *Duke Energy Carolinas, LLC, et al.*

Docket Nos. ER13–1923, et al., *Midcontinent Independent System Operator, Inc., et al.*

Docket No. EL15–32, *North Carolina Waste Awareness and Reduction Network, Inc.* v. *Duke Energy Carolinas and Duke Energy Progress.*

For more information, contact Valerie Martin, Office of Energy Market Regulation, Federal Energy Regulatory Commission at (202) 502–6139 or *Valerie.Martin@ferc.gov.*

Dated: December 10, 2015.

Nathaniel J. Davis, Sr.,

Deputy Secretary.

[FR Doc. 2015–31611 Filed 12–15–15; 8:45 am]

BILLING CODE 6717–01–P

DEPARTMENT OF ENERGY

Western Area Power Administration

Salt Lake City Area Integrated Projects and Colorado River Storage Project 2025 General Power Marketing Criteria

AGENCY: Western Area Power Administration, Department of Energy (DOE).

ACTION: Notice of the Proposed 2025 Marketing Plan and announcement of public information and comment forums.

SUMMARY: Western Area Power Administration (Western), Colorado River Storage Project Management Center (CRSP MC), a Federal power marketing agency of the Department of Energy, is seeking comments on its Proposed 2025 Marketing Plan for the Salt Lake City Area Integrated Projects (SLCA/IP). The current SLCA/IP marketing plan will expire on September 30, 2024. The Proposed General Power Marketing Criteria provides the basis for marketing the long-term, firm hydroelectric resources of the SLCA/IP to be effective October 1, 2024. The Proposed General Power Marketing Criteria for the SLCA/IP are published herein. This **Federal Register** notice (FRN) formally initiates Western's public process and request for public comments. Western will prepare and publish the final 2025 General Power Marketing Criteria after public comments on the criteria are considered. The Energy Planning and Management Program as set forth in 10 CFR part 905 is not specifically applicable to the SLCA/IP; however, Western used the Power Marketing Initiative outlined in Subpart C for general guidance in developing a framework for this proposal. This FRN is not a call for applications. A call for applications from those interested in an allocation of SLCA/IP power will occur in a future notice.

DATES: A public information forum is scheduled for Thursday, January 14, 2016, from 11 a.m. to 1 p.m. MST at the Ramada Inn, 5575 West Amelia Earhart Drive, Salt Lake City, Utah. The public comment forum is scheduled for Wednesday, February 17, 2016, from 11 a.m. to 1 p.m. MST at the Ramada Inn, 5575 West Amelia Earhart Drive, Salt Lake City, Utah. Written comments may be submitted to Western on or before March 30, 2016.

Responses to questions about the proposed criteria unanswered at the forum will be provided in writing within a reasonable period of time. An opportunity will be given to all interested parties to present written or oral statements at the public comment forum. The forums will be transcribed, and copies will be available upon request. Any fees required by the transcription firm to provide a transcribed copy will be the responsibility of the requestor. Additionally, Western is available to consult on a government-to-government basis with Tribes that express interest in doing so.

ADDRESSES: Submit written comments regarding the proposed 2025 General Power Marketing Criteria to Ms. Lynn Jeka, CRSP Manager, Western Area Power Administration, 150 East Social Hall Avenue, Suite 300, Salt Lake City, UT 84111–1580. Western's representatives will explain the proposed criteria and answer questions. Comments may also be faxed to (801) 524–5017, or emailed to *SLIPPost2024@wapa.gov*.

FOR FURTHER INFORMATION CONTACT: Mr. Parker Wicks, Public Utilities Specialist, or Mr. Steve Mullen, Public Utilities Specialist, at Western Area Power Administration, CRSP Management Center, 150 East Social Hall Avenue, Suite 300, Salt Lake City, UT 84111–1580, telephone (801) 524–5493, or email to *SLIPPost2024@wapa.gov*. Information can also be found at *https://www.wapa.gov/regions/CRSP/PowerMarketing/Pages/power-marketing.aspx*.

SUPPLEMENTARY INFORMATION: Brief descriptions of the projects included in the SLCA/IP are provided below:

Colorado River Storage Project

Authorized in 1956, the CRSP and participating projects initiated the comprehensive development and use of water resources of the Upper Colorado River. The CRSP is comprised of the Glen Canyon, Flaming Gorge, Blue Mesa, Crystal, and Morrow Point dams and powerplants. CRSP storage units stabilize the erratic flows of the Colorado River and its tributaries so annual water delivery commitments to the Lower Colorado River Basin, as well as to farmers, municipalities, and industries in the Upper Basin, can be met. Delivery of this water to consumers is accomplished, in part, through the participating projects discussed below. Additional project development may occur in future years. Initial hydroelectric generation began at the CRSP facilities in 1963. The maximum operating capacity of the five original CRSP powerplants is currently about 1,760 MW. The average annual generation over the 20-year period from 1994 through 2014 was about 5,208,238 MWh.

Participating Projects

Seedskadee Project (Fontenelle Powerplant): The Seedskadee Project was authorized as one of the initial group of participating projects authorized with the CRSP in 1956. The Fontenelle Dam, powerplant, and reservoir are the principal features of the Seedskadee Project. The powerplant commenced operation in May 1968. The maximum operating capacity of Fontenelle Powerplant is 10 MW. The average annual generation from 1994–2014 was 53,477 MWh.

Dolores Project (McPhee Dam and Towaoc Canal Powerplants): The Dolores Project was authorized by the Colorado River Basin Act of September 30, 1968, as a participating project under the Colorado River Storage Project Act. The maximum operating capacity of the two powerplants is 12.8 MW, and the combined average annual output of McPhee Dam and Towaoc Canal powerplants from 1994–2014 was 18,161 MWh.

Integrated Projects

Western consolidated and operationally integrated the Collbran and Rio Grande projects with CRSP beginning on October 1, 1987. These integrated projects have retained their separate financial obligations for repayment; however, an SLCA/IP rate is set to recover revenues to meet the repayment requirements of all projects. The maximum operating capacity of the eleven SLCA/IP powerplants is 1,818.6 MW, and the average annual generation from 1994–2014 was about 5,635,057 MWh. The SLCA/IP resources are currently marketed to approximately 140 long-term customers, and many more electric service providers enjoy this power indirectly through parent organizations that are direct customers of the SLCA/IP. Existing contracts will terminate at the end of the September 2024 billing period.

Collbran Project (Upper Molina and Lower Molina Powerplants): Authorized in 1952 and in service since 1962. The maximum operating capacity of the two powerplants is presently 13.5 MW. The average annual generation from 1994–2014 was 41,915 MWh.

Rio Grande Project (Elephant Butte Powerplant): The Rio Grande Project was authorized in 1905, and the

powerplant went into service in 1940. The maximum operating capacity of the Elephant Butte Powerplant is 27.0 MW. The average annual generation was 66,743 MWh from 1994–2014.

Current Marketing Plan Background

The final Post-1989 General Power Marketing and Allocation Criteria, SLCA/IP (Post-1989 Plan), was published in the **Federal Register** (51 FR 4844–4870, February 7, 1986) and provided the marketing plan principles used to market what is now referred to as the SLCA/IP firm hydropower resources. The firm electric service contracts associated with the Post-1989 Plan were initially to expire in 2004. Western's Energy Planning and Management Program (EPAMP) Final Rule, Subpart C—Power Marketing Initiative was adopted for the SLCA/IP as published in the **Federal Register** (64 FR 34414–34417, Friday, June 25, 1999), which extended the firm electric contracts associated with the Post-1989 Plan through September 30, 2024, and also established a Post-2004 resource pool. The current marketing plan is inclusive of the Post-1989 Plan as extended and amended by EPAMP and the Post-2004 Power Marketing Initiative.

Proposed 2025 General Power Marketing Criteria Background

During the summer of 2015, Western held four meetings to initiate informal discussions with current SLCA/IP firm electric service customers and their representatives. The meetings were held in Phoenix, Arizona; Lakewood, Colorado; Albuquerque, New Mexico; and Salt Lake City, Utah. These meetings provided customers the opportunity to review current marketing plan principles and provide informal input to Western for consideration in this Proposed 2025 Marketing Plan. Some of the key marketing plan principles discussed at the meetings included marketing area, contract term, resource pools, and marketable resource. The main input Western received from the commenters during these meetings was that the Post-1989 Plan worked well and that Western should make as few changes as possible. Western agrees and proposes to keep the general contract format and maintain the existing allocations with its current customers. Western is also proposing that, if after it completes its analysis there is additional resource available, a power pool of 2 percent be created to serve new customers. Although Western's existing customers requested that no new power pool be created and that any additional marketable resource be allocated to them to offset reductions in their allocations due to the 1996 Glen Canyon Dam Environmental Impact Statement Record of Decision, Western determined it could support additional wide-spread use by allocating any additional resource to benefit new customers rather than try to distribute a small amount of power among the approximately 135 existing customers. Western considered the feedback it received in developing the Proposed 2025 Marketing Plan, outlined below.

Proposed 2025 General Power Marketing Criteria

Western's Proposed 2025 Power Marketing Plan will remain predominantly unchanged from the Post-1989 General Power Marketing Criteria and Post-2004 Power Marketing Initiative. The Marketing Plan principles are as follows:

Proposed Marketing Plan Principles

1. *Contract Term:* A 40-year contract term would be used for firm electric service contracts. The firm electric service contract term would begin October 1, 2024, and expire September 30, 2064.

2. *Marketing Area:* The Proposed 2025 Marketing Plan supports continuing the current SLCA/IP marketing area, which is divided into Northern and Southern Divisions.

A. The Northern Division consists of the states of Colorado, New Mexico, Utah, and Wyoming; the City of Page, Arizona; a portion of the area in Arizona which lies in the drainage area of the Upper Colorado River Basin to be served by the Navajo Tribal Utility Authority; and White Pine County and portions of Elko and Eureka counties in Nevada.

B. The Southern Division consists of the remaining portion of the state of Arizona and that part of the state of Nevada in Clark, Lincoln, and Nye counties that comprise the southern portion of the state.

3. New Resource Pool: Currently, the CRSP MC is doing extensive modeling to determine the amount of SLCA/IP resource that will be available for the 2025 Marketing Plan. Western expects that capacity and energy will be available above what is currently allocated to existing customers. If so, the 2025 Marketing Plan will provide a 2 percent resource pool of the modeled marketable resource. The allocation of this resource would occur one time at the beginning of the contract term, October 1, 2024. If, after the analysis of available marketable resource is completed, there is less than 2 percent available for a resource pool, then no resource pool will be made available to new customers. Western's determination of the availability of a resource pool will be announced through an FRN. Depending upon the timing, it may be announced in conjunction with another action (*i.e.,* Final 2025 Marketing Plan) or it may be announced in a separate FRN.

4. Western will provide new allocations only to eligible preference entities in the Northern Division and Native American tribes in either the Northern or Southern Division. Western will give priority to those preference entities that currently do not receive the benefit of Federal hydropower. If the applicant has met the eligibility criteria, Western, through the public process, will determine the amount of power, if any, to allocate in accordance with the marketing criteria and administrative discretion under Reclamation Law.

5. Eligible applicants, except Native American tribes, must be ready, willing, and able to receive and distribute or use power from Western. Ready, willing, and able means the eligible applicant has the facilities needed for the receipt of power or has made the necessary arrangements for transmission and/or distribution service, and its power supply contracts with third parties permit the delivery of Western's power.

6. Eligible applicants must have the necessary arrangements for transmission and/or distribution service in place by October 1, 2023.

7. An eligible Native American applicant must be an Indian tribe as defined in the Indian Self Determination Act of 1975, 25 U.S.C. 450b, as amended.

8. In determining allocations, Western will give priority consideration in the following order to entities satisfying these marketing criteria:

A. Federally recognized Native American tribes.

B. Municipal corporations and political subdivisions including irrigation or other districts, municipalities, and other governmental organizations that have electric utility status by October 1, 2023. ''Electric utility status'' means that the entity has responsibility to meet load growth, has a distribution system, and is ready, willing, and able to purchase Federal power from Western on a wholesale basis.

C. Electric cooperatives and public utilities, other than electric utilities, that are recognized as utilities by their applicable legal authorities, are nonprofit in nature, have electrical facilities, and are independently governed and financed.

D. Other eligible applicants.

9. In determining allocations, Western will consider existing Federal power resource allocations of the applicants.

10. Western will base allocations to Native American tribes on actual loads experienced in the most recent calendar year. Western may use estimated load values if actual load data are not available. Western will evaluate and may adjust inconsistent estimates during the allocation process. Western is available to assist tribes in developing load estimates.

11. Western will base allocations to eligible applicants on the actual loads experienced in the most recent calendar year and will apply current marketing criteria to these loads.

12. The minimum allocation will be 100 kW.

13. Contractors must execute electric service contracts within 6 months of receiving a contract offer from Western, unless Western agrees otherwise in writing.

14. If unanticipated obstacles to the delivery of electric service to a Native American tribe arise, Western retains the right to provide the economic benefit of the resource directly to the tribe.

15. Existing *Marketable Resource:* Dependent upon available resource, Western proposes extending the existing contract rates of delivery commitments, with associated energy, to the existing SLCA/IP long-term, firm power customers.

16. *Hydrology and River Operations Withdrawal Provision:* Western will reserve the right to adjust, at its discretion and sole determination, the contract rate of delivery on 5 years' advance written notice in response to changes in hydrology and river operations. Any such adjustments would occur after an appropriate public process.

17. *Service Seasons:* The Proposed 2025 Marketing Plan supports continuing the current SLCA/IP summer and winter seasons.

A. Summer Season: The 6-month period from the first day of the April billing period through the last day of the September billing period in any calendar year.

B. Winter Season: The 6-month period from the first day of the October billing period of any calendar year through the last day of the March billing period of the next succeeding calendar year.

18. *Retention of Existing Contract Provisions:* The Proposed 2025 Marketing Plan supports using the existing SLCA/IP firm electric service contract provisions with only minor modifications. Customer Displacement Power (CDP) and Western Replacement Power (WRP) contract provisions will continue to be available in the new SLCA/IP firm electric service contracts. The CDP and WRP provisions allow customers, at their discretion, to augment hydropower allocations with purchase power. Western reserves enough capacity on the CRSP transmission system to deliver the maximum amount of hydropower the system is capable of generating, which under certain conditions can sometime occur. In times when hydropower deliveries are lower, this transmission capacity can be made available for use by the customers. Under CDP, customers may elect to use this reserved transmission capacity to deliver their own energy resources in hours that it is needed to augment the hydropower deliveries. WRP is similar to CDP, but customers request that Western act as their agent and purchase energy available on the market to augment hydropower deliveries.

Availability of Information

Documents developed or retained by Western during this public process will be available, by appointment, for inspection and copying at the CRSP MC, located at 150 East Social Hall Avenue, Suite 300, Salt Lake City, Utah. Western will post information concerning the Proposed 2025 Marketing Plan on its Web site at: *https://www.wapa.gov/regions/CRSP/PowerMarketing/Pages/power-marketing.aspx.* Written comments received as part of the 2025 Marketing Plan formal public process will be available for viewing on the Web site.

Procedural Requirements

Environmental Compliance

Western will evaluate this action for compliance with the National Environmental Policy Act (NEPA) of 1969 (42 U.S.C. 4321–4347), the Council on Environmental Quality Regulations (40 CFR parts 1500–1508), and DOE NEPA Regulations (10 CFR 1021).

Determination Under Executive Order 12866

Western has an exemption from centralized regulatory review under Executive Order 12866; accordingly, no clearance of this notice by the Office of Management and Budget is required.

Dated: December 8, 2015.

Mark A. Gabriel,

Administrator.

[FR Doc. 2015–31619 Filed 12–15–15; 8:45 am]

BILLING CODE 6450–01–P

ENVIRONMENTAL PROTECTION AGENCY

[EPA–HQ–OW–2011–0439; FRL 9939–81–OEI]

Information Collection Request Submitted to OMB for Review and Approval; Comment Request; Disinfectants/Disinfection Byproducts, Chemical and Radionuclides Rules

AGENCY: Environmental Protection Agency (EPA).

ACTION: Notice.

SUMMARY: The U.S. Environmental Protection Agency (EPA) has submitted an Information Collection Request (ICR) for the Disinfectants/Disinfection Byproducts, Chemical and Radionuclides Rules (EPA ICR No. 1896.10, OMB Control No. 2040–0204) to the Office of Management and Budget (OMB) for review and approval in accordance with the Paperwork Reduction Act (PRA; 44 U.S.C. 3501 *et seq.*). This is a proposed extension of the ICR, which is currently approved through December 31, 2015. Public comments were previously requested via the **Federal Register** (80 FR 17040) on March 31, 2015, during a 60-day comment period. This notice allows for an additional 30 days for public comments. A description of the ICR is provided in this renewal notice, including its estimated burden and cost to the public. An Agency may not conduct or sponsor and a person is not required to respond to a collection of information unless it displays a currently valid OMB control number.

DATES: Additional comments may be submitted on or before January 15, 2016.

ADDRESSES: Submit your comments, referencing Docket ID Number EPA–HQ–OW–2011–0439, to (1) EPA online using *www.regulations.gov* (our preferred method), by email to *OW-Docket@epa.gov* or by mail to EPA Docket Center, Environmental Protection Agency, Mail Code 28221T, 1200 Pennsylvania Ave. NW., Washington, DC 20460, and (2) OMB via email to *oira_submission@omb.eop.gov.* Address comments to OMB Desk Officer for EPA.

EPA's policy is that all comments received will be included in the public docket without modification including any personal information provided, unless the comment includes profanity, threats, information claimed to be Confidential Business Information (CBI) or other information whose disclosure is restricted by statute.

FOR FURTHER INFORMATION CONTACT: Kevin Roland, Drinking Water

Protection Division, Office of Ground Water and Drinking Water, (4606M), Environmental Protection Agency, 1200 Pennsylvania Ave. NW., Washington, DC 20460; telephone number: 202–564–4588; email address: *roland.kevin@epa.gov.*

SUPPLEMENTARY INFORMATION: Supporting documents which explain in detail the information that the EPA will be collecting are available in the public docket for this ICR. The docket can be viewed online at *www.regulations.gov,* or in person at the EPA Docket Center, WJC West, Room 3334, 1301 Constitution Ave. NW., Washington, DC. The telephone number for the Docket Center is 202–566–1744. For additional information about EPA's public docket, visit *http://www.epa.gov/dockets.*

Abstract: The Disinfectants/Disinfection Byproducts, Chemical and Radionuclides Rules ICR examines public water systems' and primacy agencies' burden and costs for recordkeeping and reporting requirements in support of the chemical drinking water regulations. These recordkeeping and reporting requirements are mandatory for compliance with the *Code of Federal Regulations* (CFR) at 40 CFR parts 141 and 142. The following chemical regulations are included: The Stage 1 Disinfectants and Disinfection Byproducts Rule (Stage 1 DBPR), the Stage 2 Disinfectants and Disinfection Byproducts Rule (Stage 2 DBPR), the Chemical Phase Rules (Phases II/IIB/V), the Radionuclides Rule, the Disinfectant Residual Monitoring and Associated Activities under the Surface Water Treatment Rule (SWTR), the Arsenic Rule and the Lead and Copper Rule (LCR). Future chemical-related rulemakings will be added to this consolidated ICR after the regulations are promulgated and the initial, rule-specific, ICRs are due to expire.

Form Numbers: None.

Respondents/affected entities: Entities potentially affected by this action are new and existing public water systems and primacy agencies.

Respondent's obligation to respond: Mandatory for compliance with 40 CFR parts 141 and 142.

Estimated number of respondents: 149,822.

Frequency of response: Varies by requirement (*i.e.,* on occasion, monthly, quarterly, semi-annually, annually, biennially, and every 3, 6 and 9 years).

Total estimated burden: 5,305,696 hours (per year). Burden is defined in 5 CFR 1320.03(b).

T*otal estimated cost:* $464,896,000 (per year), includes $5,492,000 annualized capital costs and $253,440,000 operation and maintenance costs.

Changes in the Estimates: There is a decrease of 428,639 hours in the total estimated respondent burden compared with the ICR currently approved by OMB. This decrease is a result of updating relevant baseline information for each rule with the most current and accurate information available and updating burden to incorporate the results of consultation with stakeholders. Estimated violation and other associated rates have also been updated to reflect current information on rule compliance.

Courtney Kerwin,

Acting Director, Collection Strategies Division.

[FR Doc. 2015–31540 Filed 12–15–15; 8:45 am]

BILLING CODE 6560–50–P

ENVIRONMENTAL PROTECTION AGENCY

[EPA–HQ–RCRA–2013–0110; FRL–9940–16–OEI]

Information Collection Request Submitted to OMB for Review and Approval; Comment Request; Categorical Non-Waste Determination for Selected Non Hazardous Secondary Materials (NHSM): Construction and Demolition Wood, Paper Recycling Process Residuals, and Creosote-Treated Railroad Ties (Additions to List of Section 241.4 Categorical Non-Waste Fuels)

AGENCY: Environmental Protection Agency (EPA).

ACTION: Notice.

SUMMARY: The Environmental Protection Agency has submitted an information collection request (ICR), ''Categorical Non-Waste Determination for Selected Non Hazardous Secondary Materials (NHSM): Construction and Demolition Wood, Paper Recycling Process Residuals, and Creosote-Treated Railroad Ties (Additions to List of Section 241.4 Categorical Non-Waste Fuels)'' (EPA ICR No. 2493.01, OMB Control No. 2050–XXXX) to the Office of Management and Budget (OMB) for review and approval in accordance with the Paperwork Reduction Act (44 U.S.C. 3501 *et seq.*). This is a request for approval of a new collection. Public comments were previously requested via the **Federal Register** (79 FR 21006) on April 14, 2014 during a 60-day comment period. This notice allows for an additional 30 days for public comments. A fuller description of the ICR is given below, including its estimated burden and cost to the public. An Agency may not conduct or sponsor and a person is not required to respond to a collection of information unless it displays a currently valid OMB control number.

DATES: Additional comments may be submitted on or before January 15, 2016.

ADDRESSES: Submit your comments, referencing Docket ID Number EPA–HQ–RCRA–2013–0110, to (1) EPA online using *www.regulations.gov* (our preferred method), by email to *rcra-docket@epa.gov,* or by mail to: EPA Docket Center, Environmental Protection Agency, Mail Code 28221T, 1200 Pennsylvania Ave. NW., Washington, DC 20460, and (2) OMB via email to *oira_submission@omb.eop.gov.* Address comments to OMB Desk Officer for EPA.

EPA's policy is that all comments received will be included in the public docket without change including any personal information provided, unless the comment includes profanity, threats, information claimed to be Confidential Business Information (CBI) or other information whose disclosure is restricted by statute.

FOR FURTHER INFORMATION CONTACT: Jesse Miller, Office of Resource Conservation and Recovery, Materials Recovery and Waste Management Division, MC 5302P, Environmental Protection Agency, 1200 Pennsylvania Ave. NW., Washington, DC 20460; telephone number: (703) 308–1180; fax number: (703) 308–0522; email address: *miller.jesse@epa.gov.*

SUPPLEMENTARY INFORMATION: Supporting documents which explain in detail the information that the EPA will be collecting are available in the public docket for this ICR. The docket can be viewed online at *www.regulations.gov* or in person at the EPA Docket Center, WJC West, Room 3334, 1301 Constitution Ave. NW., Washington, DC. The telephone number for the Docket Center is 202–566–1744. For additional information about EPA's public docket, visit *http://www.epa.gov/dockets.*

Abstract: EPA published the Non-Hazardous Secondary Materials (NHSM) Rule on March 21, 2011. Amendments to this rule were published in the **Federal Register** on February 7, 2013. These amendments provided clarification on certain issues on which EPA received new information, as well as specific targeted revisions. In addition, these amendments listed several NHSMs as categorical non-wastes when used as fuels. The Agency also indicated that we would consider

adding additional materials to the categorical listings.

The rule associated with this ICR Supporting Statement proposes to add three additional materials to the list of categorical non-waste fuels: (1) Construction and demolition (C&D) wood processed from construction and demolition debris according to best management practices; (2) paper recycling residuals (PRRs), including old corrugated cardboard (OCC) rejects, generated from the recycling of recovered paper and paperboard products and burned on-site by paper recycling mills whose boilers are designed to burn solid fuel, and (3) creosote-treated railroad ties that are processed and combusted in units designed to burn both biomass and fuel oil. This ICR is a description of the indirect information collection requirements associated with the proposed rule. There are two burden categories associated with this action: reading and understanding the rule, and certification statements for affected facilities.

Form Numbers: None.

Respondents/affected entities: Generators, users, and potential users of the new materials proposed to be added to the list of categorical non-waste fuels.

Respondent's obligation to respond: Voluntary, required to obtain non-waste determinations for non-hazardous secondary materials (40 CFR part 241).

Estimated number of respondents: 605 (total).

Frequency of response: Once.

Total estimated burden: 885 hours (per year). Burden is defined at 5 CFR 1320.03(b).

Total estimated cost: $64,739 (per year), includes $0 annualized capital or operation & maintenance costs.

Changes in the Estimates: This is a new collection.

Courtney Kerwin,

Acting Director, Collection Strategies Division.

[FR Doc. 2015–31541 Filed 12–15–15; 8:45 am]

BILLING CODE 6560–50–P

ENVIRONMENTAL PROTECTION AGENCY

[EPA–HQ–SFUND–2005–0007; FRL–9937–24–OEI]

Information Collection Request Submitted to OMB for Review and Approval; Comment Request; EPA Worker Protection Standards for Hazardous Waste Operations and Emergency Response (Renewal)

AGENCY: Environmental Protection Agency (EPA).

ACTION: Notice.

SUMMARY: The Environmental Protection Agency has submitted an information collection request (ICR), ''EPA Worker Protection Standards for Hazardous Waste Operations and Emergency Response (Renewal)'' (EPA ICR No. 1426.11, OMB Control No. 2050–0105) to the Office of Management and Budget (OMB) for review and approval in accordance with the Paperwork Reduction Act (44 U.S.C. 3501 *et seq.*). This is a proposed extension of the ICR, which is currently approved through December 31, 2015. Public comments were previously requested via the **Federal Register** 80 FR 60144 on October 5, 2015 during a 60-day comment period. This notice allows for an additional 30 days for public comments. A fuller description of the ICR is given below, including its estimated burden and cost to the public. An Agency may not conduct or sponsor and a person is not required to respond to a collection of information unless it displays a currently valid OMB control number.

DATES: Additional comments may be submitted on or before January 15, 2016.

ADDRESSES: Submit your comments, referencing Docket ID Number EPA–HQ–SFUND–2005–0007, to (1) EPA online using *www.regulations.gov* (our preferred method), by email to *superfund.docket@epa.gov,* or by mail to: EPA Docket Center, Environmental Protection Agency, Mail Code 28221T, 1200 Pennsylvania Ave. NW., Washington, DC 20460, and (2) OMB via email to *oira_submission@omb.eop.gov.* Address comments to OMB Desk Officer for EPA.

EPA's policy is that all comments received will be included in the public docket without change including any personal information provided, unless the comment includes profanity, threats, information claimed to be Confidential Business Information (CBI) or other information whose disclosure is restricted by statute.

FOR FURTHER INFORMATION CONTACT: Sella M. Burchette, U.S. Environmental Response Team, MS 101, Building 205, Edison, NJ 08837, telephone number: 732–321–6726; fax number: 732–321–6724; email address: *burchette.sella@epa.gov*.

SUPPLEMENTARY INFORMATION: Supporting documents which explain in detail the information that the EPA will be collecting are available in the public docket for this ICR. The docket can be viewed online at *www.regulations.gov* or in person at the EPA Docket Center, WJC West, Room 3334, 1301 Constitution Ave. NW., Washington, DC. The telephone number for the Docket Center is 202–566–1744. For additional information about EPA's public docket, visit *http://www.epa.gov/dockets.*

Abstract: Section 126(f) of the Superfund Amendments and Reauthorization Act of 1986 (SARA) requires EPA to set worker protection standards for State and local employees engaged in hazardous waste operations and emergency response in the 27 States that do not have Occupational Safety and Health Administration approved State plans. The EPA coverage, as cited in 40 CFR 311, required to be identical to the OSHA standards, extends to three categories of employees: Those engaged in clean-ups at uncontrolled hazardous waste sites, including corrective actions at Treatment, Storage and Disposal (TSD) facilities regulated under the Resource Conservation and Recovery Act (RCRA); employees working on routine hazardous waste operations at RCRA TSD facilities, and employees involved in emergency response operations without regard to location. This ICR renews existing mandatory record keeping collection of ongoing activities including monitoring of any potential employee exposure at uncontrolled hazardous waste sites, maintaining records of employee training, refresher training, medical exams and reviewing emergency response plans.

Form Numbers: None.

Respondents/affected entities: State and local employees engaged in hazardous waste operations and emergency response in the 27 States that do not have Occupational Health & Safety Administration (OSHA) approved State plans.

Respondent's Obligation to respond: Mandatory. Section (e) and by statue in Section (f)[8] of OSHA's 29 CFR 1910.120.

Estimated number of respondents: 23,900.

Frequency of response: Once, Annual, On occasion.

Total estimated burden: 255,477 hours (per year). Burden is defined at 5 CFR 1320.03(b)

Total estimated cost: $4,668,688 (per year), includes $0 annualized capital or operation & maintenance costs.

Changes in Estimates: There is no change of the hours in the total estimated respondent burden compared with the ICR currently approved by OMB. This is due to the program maturing and stabilizing. The cost

increased by $1,143,100, which is due to increased labor rates.

Courtney Kerwin,

Acting Director, Collection Strategies Division.

[FR Doc. 2015–31539 Filed 12–15–15; 8:45 am]

BILLING CODE 6560–50–P

ENVIRONMENTAL PROTECTION AGENCY

[EPA–HQ–ORD–2015–0659; FRL–9939–98–OEI]

Information Collection Request Submitted to OMB for Review and Approval; Comment Request; Generic Clearance for Citizen Science and Crowdsourcing Projects (New)

AGENCY: Environmental Protection Agency (EPA).

ACTION: Notice.

SUMMARY: The Environmental Protection Agency has submitted an information collection request (ICR), ''Generic Clearance for Citizen Science and Crowdsourcing Projects (New)'' (EPA ICR No. 2521.01, OMB Control No. 2080—NEW) to the Office of Management and Budget (OMB) for review and approval in accordance with the Paperwork Reduction Act (44 U.S.C. 3501 *et seq.*). This is a request for approval of a new collection. Public comments were previously requested via the **Federal Register** (80 FR 59148) on October 1, 2015 during a 60-day comment period. This notice allows for an additional 30 days for public comments. A fuller description of the ICR is given below, including its estimated burden and cost to the public. An Agency may not conduct or sponsor and a person is not required to respond to a collection of information unless it displays a currently valid OMB control number.

DATES: Additional comments may be submitted on or before January 15, 2016.

ADDRESSES: Submit your comments, referencing Docket ID Number EPA–HQ–ORD–2015–0659 to (1) EPA online using *www.regulations.gov* (our preferred method), or by mail to: EPA Docket Center, Environmental Protection Agency, Mail Code 28221T, 1200 Pennsylvania Ave. NW., Washington, DC 20460, and (2) OMB via email to *oira_submission@omb.eop.gov.* Address comments to OMB Desk Officer for EPA.

EPA's policy is that all comments received will be included in the public docket without change including any personal information provided, unless the comment includes profanity, threats, information claimed to be Confidential Business Information (CBI) or other information whose disclosure is restricted by statute.

FOR FURTHER INFORMATION CONTACT: Jay Benforado, IOAA–ORD, Mail Code 8101R, Environmental Protection Agency, 1200 Pennsylvania Ave. NW., Washington, DC 20460; telephone number: 202–564–3262; fax number: 202–565–2494; email address: *benforado.jay@epa.gov.*

SUPPLEMENTARY INFORMATION: Supporting documents which explain in detail the information that the EPA will be collecting are available in the public docket for this ICR. The docket can be viewed online at *www.regulations.gov* or in person at the EPA Docket Center, WJC West, Room 3334, 1301 Constitution Ave. NW., Washington, DC. The telephone number for the Docket Center is 202–566–1744. For additional information about EPA's public docket, visit *http://www.epa.gov/dockets.*

Abstract: EPA relies on scientific information. Citizen science and crowdsourcing techniques will allow the Agency to collect qualitative and quantitative data that might help inform scientific research, assessments, or environmental screening; validate environmental models or tools; or enhance the quantity and quality of data collected across the country's diverse communities and ecosystems to support the Agency's mission. Information gathered under this generic clearance will be used by the Agency to support the activities listed above and might provide unprecedented avenues for conducting breakthrough research. Collections under this generic ICR will be from participants who actively seek to participate on their own initiative through an open and transparent process (the Agency does not select participants or require participation); the collections will be low-burden for participants; collections will be low-cost for both the participants and the Federal Government; and data will be available to support the scientific research (including assessments, environmental screening, tools, models, etc.) of the Agency, states, tribal or local entities where data collection occurs. EPA may, by virtue of collaborating with non-federal entities, sponsor the collection of this type of information in connection with citizen science projects. When applicable, all such collections will accord with Agency policies and regulations related to human subjects research and will follow the established approval paths through EPA's Human Subjects Research Review Official. Finally, personally identifiable information (PII) will only be collected when necessary and in accordance with applicable federal procedures and policies. If a new collection is not within the parameters of this generic ICR, the Agency will submit a separate ICR to OMB for approval.

Form Numbers: None.

Respondents/affected entities: Individuals.

Respondent's obligation to respond: Voluntary.

Estimated number of respondents: 42,500 (total).

Frequency of response: The frequency of responses will range from once to on occasion.

Total estimated burden: 389,083 hours (per year). Burden is defined at 5 CFR 1320.03(b)

Total estimated cost: $12,893,959 (per year), includes $525,000 annualized capital for operation & maintenance costs.

Changes in the Estimates: This is a new information collection.

Courtney Kerwin,

Acting Director, Collection Strategies Division.

[FR Doc. 2015–31542 Filed 12–15–15; 8:45 am]

BILLING CODE 6560–50–P

ENVIRONMENTAL PROTECTION AGENCY

[EPA–HQ–OW–2011–0465; FRL 9940–12–OEI]

Information Collection Request Submitted to OMB for Review and Approval; Comment Request; Water Quality Standards Regulation (Renewal)

AGENCY: Environmental Protection Agency (EPA).

ACTION: Notice.

SUMMARY: The Environmental Protection Agency has submitted an information collection request (ICR), ''Water Quality Standards Regulation (Renewal)'' (EPA ICR No. 0988.12, OMB Control No. 2040–0049) to the Office of Management and Budget (OMB) for review and approval in accordance with the Paperwork Reduction Act (44 U.S.C. 3501 *et seq.*). This is a proposed extension of the ICR, which is currently approved through December 31, 2015. Public comments were previously requested via the **Federal Register** (80 FR 37616 on July 1, 2015), during a 60-day comment period. This notice allows for an additional 30 days for public comments. A fuller description of the ICR is given below. An Agency may not

conduct or sponsor and a person is not required to respond to a collection of information unless it displays a currently valid OMB control number.

DATES: Additional comments may be submitted on or before January 15, 2016.

ADDRESSES: Submit your comments, referencing Docket ID No. EPA–HQ–OW–2011–0465, online using *www.regulations.gov* (our preferred method), by email to *ow-docket@epa.gov,* or by mail to: EPA Docket Center, Environmental Protection Agency, Mail Code 28221T, 1200 Pennsylvania Ave. NW., Washington, DC 20460.

EPA's policy is that all comments received will be included in the public docket without change including any personal information provided, unless the comment includes profanity, threats, information claimed to be Confidential Business Information (CBI) or other information whose disclosure is restricted by statute.

FOR FURTHER INFORMATION CONTACT: Tangela Cooper, Office of Water, Office of Science and Technology, Standards and Health Protection Division, (4305T), Environmental Protection Agency, 1200 Pennsylvania Ave. NW., Washington, DC 20460; telephone number: 202–566–0369; email address: *cooper.tangela@epa.gov*.

SUPPLEMENTARY INFORMATION: Supporting documents which explain in detail the information that the EPA will be collecting are available in the public docket for this ICR. The docket can be viewed online at *www.regulations.gov* or in person at the EPA Docket Center, WJC West, Room 3334, 1301 Constitution Ave. NW., Washington, DC. The telephone number for the Docket Center is 202–566–1744. For additional information about EPA's public docket, visit *http://www.epa.gov/dockets.*

Abstract: Water quality standards are provisions of state, tribal, and federal law that consist of designated uses for waters of the United States, water quality criteria to protect the designated uses, and an antidegradation policy. Section 303(c) of the Clean Water Act requires states and authorized tribes to establish water quality standards, and to review and, if appropriate, revise their water quality standards once every three years. The Act also requires EPA to review and either approve or disapprove the new or revised standards, and to promulgate replacement federal standards if necessary. Section 118(c)(2) of the Act specifies additional water quality standards requirements for waters of the Great Lakes system.

The Water Quality Standards Regulation (40 CFR part 131 and portions of part 132) governs national implementation of the water quality standards program. The Regulation describes requirements and procedures for states and authorized tribes to develop, review, and revise their water quality standards, and EPA procedures for reviewing and approving the water quality standards. The regulation also establishes specific additional requirements for water quality standards and their implementation in the waters of the Great Lakes system, contained in the Water Quality Guidance for the Great Lakes System (40 CFR part 132).

Form Numbers: None.

Respondents/affected entities: States, territories, and Indian tribes with EPA-approved standards; NPDES-permitted facilities that discharge into the Great Lakes.

Respondent's obligation to respond: Mandatory or required to obtain or retain a benefit, pursuant to 40 CFR parts 131 and 132.

Estimated number of respondents: 2,787 (total).

Frequency of response: Generally annual.

Total estimated burden: 292,305 hours (per year). Burden is defined at 5 CFR 1320.03(b).

Total estimated cost: $13,579,575 (per year). There are no annualized capital or operation & maintenance costs.

Changes in Estimates: There is an increase of 15,324 hours in the total estimated respondent burden compared with the ICR currently approved by OMB. This increase reflects an increase in the estimated number of respondents to reflect EPA's approval of water quality standards for four additional tribes, and minor adjustments to reflect updated estimates of Great Lakes activities.

Courtney Kerwin,

Acting Director, Collection Strategies Division.

[FR Doc. 2015–31538 Filed 12–15–15; 8:45 am]

BILLING CODE 6560–50–P

EXPORT-IMPORT BANK OF THE UNITED STATES

[Public Notice 2015–6020]

Agency Information Collection Activities: Comment Request

AGENCY: Export-Import Bank of the United States.

ACTION: Submission for OMB review and comments request.

Form Title: EIB 15–03, Small Business Exporter Survey on US Content Requirement.

SUMMARY: The Export-Import Bank of the United States (Ex-Im Bank), as a part of its continuing effort to reduce paperwork and respondent burden, invites the general public and other Federal Agencies to comment on the proposed information collection, as required by the Paperwork Reduction Act of 1995.

Under Ex-Im Bank's Short and Medium-Term Insurance and Medium-Term Guarantee programs exported goods and services must meet established content requirement to be eligible for Ex-Im Bank financing and ensure that US-jobs benefit from Ex-Im bank programs. Ex-Im Bank relied upon the exporter's self-certification of content was never verified. The small business exporter survey seeks to obtain feedback from customers on US content requirement. This survey will help Ex-Im Bank better understand small business customers' perspectives on the bank's existence, monitoring, ability to perform compliance on potential areas of concern for exporters and how Ex-Im Bank's requirement impacts their small business. The objective is to identify possible service improvements and better understand small business owners' experiences working with Ex-Im Bank.

The survey can be reviewed at: *http://www.valuerecoveryholding.com/pending/surveyquestionnaire.html*

DATES: Comments should be received on or before February 16, 2016.

ADDRESSES: Comments may be submitted electronically on *WWW.REGULATIONS.GOV* or by mail to Nigussie Haile, Export Import Bank of the United States, 811 Vermont Ave. NW., Washington, DC 20571

SUPPLEMENTARY INFORMATION:

Titles and Form Number: EIB 15–03, Small Business Exporter Survey on US Content Requirement.

OMB Number: 3048–XXXX.

Type of Review: Regular.

Need and Use: The information requested enables Ex-Im Bank to identify possible service improvements to the benefit of small business exporters.

The number of respondents: 1,000.

Estimated time per respondents: 10 minutes.

The frequency of response: One time.

Annual hour burden: 166.7 total hrs.

Government Expenses

Reviewing time per response: 5 minutes.

Responses per year: 1,000.

Reviewing time per year: 83.33 hours.
Average Wages per hour: $42.50.
Average cost per year: (time * wages) $3,541.67.
Benefits and overhead: 20%.
Total Government Cost: $4,250.

Bonita Jones-McNeil,

Program Analyst, Records Management Division.

[FR Doc. 2015–31530 Filed 12–15–15; 8:45 am]

BILLING CODE 6690–01–P

FEDERAL COMMUNICATIONS COMMISSION

[OMB 3060–0270]

Information Collection Being Submitted for Review and Approval to the Office of Management and Budget

AGENCY: Federal Communications Commission.

ACTION: Notice and request for comments.

SUMMARY: As part of its continuing effort to reduce paperwork burdens, and as required by the Paperwork Reduction Act (PRA) of 1995 (44 U.S.C. 3501–3520), the Federal Communications Commission (FCC or Commission) invites the general public and other Federal agencies to take this opportunity to comment on the following information collections. Comments are requested concerning: whether the proposed collection of information is necessary for the proper performance of the functions of the Commission, including whether the information shall have practical utility; the accuracy of the Commission's burden estimate; ways to enhance the quality, utility, and clarity of the information collected; ways to minimize the burden of the collection of information on the respondents, including the use of automated collection techniques or other forms of information technology; and ways to further reduce the information collection burden on small business concerns with fewer than 25 employees.

The FCC may not conduct or sponsor a collection of information unless it displays a currently valid Office of Management and Budget (OMB) control number. No person shall be subject to any penalty for failing to comply with a collection of information subject to the PRA that does not display a valid OMB control number.

DATES: Written comments should be submitted on or before January 15, 2016. If you anticipate that you will be submitting comments, but find it difficult to do so within the period of time allowed by this notice, you should advise the contacts below as soon as possible.

ADDRESSES: Direct all PRA comments to Nicholas A. Fraser, OMB, via email *Nicholas_A._Fraser@omb.eop.gov;* and to Cathy Williams, FCC, via email *PRA@fcc.gov* and to *Cathy.Williams@fcc.gov.* Include in the comments the OMB control number as shown in the **SUPPLEMENTARY INFORMATION** section below.

FOR FURTHER INFORMATION CONTACT: For additional information or copies of the information collection, contact Cathy Williams at (202) 418–2918. To view a copy of this information collection request (ICR) submitted to OMB: (1) Go to the Web page *http://www.reginfo.gov/public/do/PRAMain*, (2) look for the section of the Web page called ''Currently Under Review,'' (3) click on the downward-pointing arrow in the ''Select Agency'' box below the ''Currently Under Review'' heading, (4) select ''Federal Communications Commission'' from the list of agencies presented in the ''Select Agency'' box, (5) click the ''Submit'' button to the right of the ''Select Agency'' box, (6) when the list of FCC ICRs currently under review appears, look for the OMB control number of this ICR and then click on the ICR Reference Number. A copy of the FCC submission to OMB will be displayed.

SUPPLEMENTARY INFORMATION:

OMB Control No.: 3060–0270.

Title: Section 90.443, Content of Station Records.

Form No.: N/A.

Type of Review: Extension of a currently approved collection.

Respondents: Business or other for-profit, not-for-profit institutions, and state, local or tribal government.

Number of Respondents: 63,375 respondents; 63,375 responses.

Estimated Time per Response: .25 hours.

Frequency of Response: Recordkeeping requirement.

Obligation to Respond: Required to obtain or retain benefits. Statutory authority for this collection of information is contained in 47 U.S.C. Section 303(j), as amended.

Total Annual Burden: 15,844 hours.

Annual Cost Burden: No cost.

Privacy Act Impact Assessment: No impact(s).

Nature and Extent of Confidentiality: There is no need for confidentiality with this collection of information.

Needs and Uses: Section 90.443(b) requires that each licensee of a station shall maintain records for all stations by providing the dates and pertinent details of any maintenance performed on station equipment, along with the name and address of the service technician who did the work. If all maintenance is performed by the same technician or service company, the name and address need be entered only once in the station records.

Section 90.443(c) requires that at least one licensee participating in the cost arrangement must maintain cost sharing records.

Federal Communications Commission.

Gloria J. Miles,

Federal Register Liaison Officer, Office of the Secretary.

[FR Doc. 2015–31638 Filed 12–15–15; 8:45 am]

BILLING CODE 6712–01–P

FEDERAL COMMUNICATIONS COMMISSION

[OMB 3060–0281]

Information Collection Being Reviewed by the Federal Communications Commission Under Delegated Authority

AGENCY: Federal Communications Commission.

ACTION: Notice and request for comments.

SUMMARY: As part of its continuing effort to reduce paperwork burdens, and as required by the Paperwork Reduction Act (PRA) of 1995 (44 U.S.C. 3501–3520), the Federal Communications Commission (FCC or the Commission) invites the general public and other Federal agencies to take this opportunity to comment on the following information collection. Comments are requested concerning: Whether the proposed collection of information is necessary for the proper performance of the functions of the Commission, including whether the information shall have practical utility; the accuracy of the Commission's burden estimate; ways to enhance the quality, utility, and clarity of the information collected; ways to minimize the burden of the collection of information on the respondents, including the use of automated collection techniques or other forms of information technology; and ways to further reduce the information collection burden on small business concerns with fewer than 25 employees. The FCC may not conduct or sponsor a collection of information unless it displays a currently valid control number. No person shall be subject to any penalty for failing to comply with a collection of information subject to the

PRA that does not display a valid Office of Management and Budget (OMB) control number.

DATES: Written PRA comments should be submitted on or before February 16, 2016. If you anticipate that you will be submitting comments, but find it difficult to do so within the period of time allowed by this notice, you should advise the contact listed below as soon as possible.

ADDRESSES: Direct all PRA comments to Cathy Williams, FCC, via email *PRA@fcc.gov* and to *Cathy.Williams@fcc.gov.*

FOR FURTHER INFORMATION CONTACT: For additional information about the information collection, contact Cathy Williams at (202) 418–2918.

SUPPLEMENTARY INFORMATION:

OMB Control Number: 3060–0281.

Title: Section 90.651, Supplemental Reports Required of Licensees Authorized Under this Subpart.

Form Number: N/A.

Type of Review: Extension of a currently approved collection. Business or other for-profit entities, not-for-profit institutions and state, local or tribal government.

Number of Respondents and Responses: 190 respondents; 346 responses.

Estimated Time per Response: .166 hours (10 minutes).

Frequency of Response: On occasion reporting requirement.

Obligation to Respond: Required to obtain or retain benefits. Statutory authority for this information collection is contained in 47 U.S.C. 154(i), 161, 303(g), 303(r), 332(c)(7).

Total Annual Burden: 57 hours.

Total Annual Cost: No cost.

Privacy Impact Assessment: No impact(s).

Nature and Extent of Confidentiality: There is no need for confidentiality with this collection of information.

Needs and Uses: In a Report and Order (FCC 99–9, released February 19, 1999) in WT Docket 97–153, the Commission, under section 90.651, adopted a revised time frame for reporting the number of mobile units placed in operation from eight months to 12 months of the grant date of their license. The radio facilities addressed in this subpart of the rules are allocated on and governed by regulations designed to award facilities on a need basis determined by the number of mobile units served by each base station. This is necessary to avoid frequency hoarding by applicants. This rule section requires licensees to report the number of mobile units served via FCC Form 601. The Commission is extending this reporting requirement for a period of three years in the Office of the Management and Budget's (OMB) inventory.

Federal Communications Commission.

Gloria J. Miles,

Federal Register Liaison Officer, The Office of the Secretary.

[FR Doc. 2015–31573 Filed 12–15–15; 8:45 am]

BILLING CODE 6712–01–P

FEDERAL DEPOSIT INSURANCE CORPORATION

Notice to All Interested Parties of the Termination of the Receivership of 10227, Champion Bank, Creve Coeur, MO

Notice is hereby given that the Federal Deposit Insurance Corporation (''FDIC'') as Receiver for Champion Bank, Creve Coeur, MO (''the Receiver'') intends to terminate its receivership for said institution. The FDIC was appointed receiver of Champion Bank on April 20, 2010. The liquidation of the receivership assets has been completed. To the extent permitted by available funds and in accordance with law, the Receiver will be making a final dividend payment to proven creditors.

Based upon the foregoing, the Receiver has determined that the continued existence of the receivership will serve no useful purpose. Consequently, notice is given that the receivership shall be terminated, to be effective no sooner than thirty days after the date of this Notice. If any person wishes to comment concerning the termination of the receivership, such comment must be made in writing and sent within thirty days of the date of this Notice to: Federal Deposit Insurance Corporation, Division of Resolutions and Receiverships, Attention: Receivership Oversight Department 32.1, 1601 Bryan Street, Dallas, TX 75201.

No comments concerning the termination of this receivership will be considered which are not sent within this time frame.

Date: December 10, 2015.

Federal Deposit Insurance Corporation.

Robert E. Feldman,

Executive Secretary.

[FR Doc. 2015–31543 Filed 12–15–15; 8:45 am]

BILLING CODE 6714–01–P

FEDERAL ELECTION COMMISSION

[Notice 2015–12]

Filing Dates for the Ohio Special Elections in the 8th Congressional District

AGENCY: Federal Election Commission.

ACTION: Notice of filing dates for special elections.

SUMMARY: Ohio has scheduled special elections on March 15, 2016, and June 7, 2016, to fill the U.S. House of Representatives seat in the 8th Congressional District vacated by Representative John Boehner.

Committees required to file reports in connection with the Special Primary Election on March 15, 2016, shall file a 12-day Pre-Primary Report. Committees required to file reports in connection with both the Special Primary and the Special General Election on June 7, 2016, shall file a 12-day Pre-Primary Report, 12-day Pre-General Report and a Post-General Report.

FOR FURTHER INFORMATION CONTACT: Ms. Elizabeth S. Kurland, Information Division, 999 E Street NW., Washington, DC 20463; Telephone: (202) 694–1100; Toll Free (800) 424–9530.

SUPPLEMENTARY INFORMATION:

Principal Campaign Committees

All principal campaign committees of candidates who participate in the Ohio Special Primary and Special General Elections shall file a 12-day Pre-Primary Report on March 3, 2016; a 12-day Pre-General Report on May 26, 2016; and a Post-General Report on July 7, 2016. (See charts below for the closing date for each report.)

All principal campaign committees of candidates participating *only* in the Special Primary Election shall file a 12-day Pre-Primary Report on March 3, 2016. (See charts below for the closing date for each report.)

Unauthorized Committees (PACs and Party Committees)

Political committees filing on a quarterly basis in 2016 are subject to special election reporting if they make previously undisclosed contributions or expenditures in connection with the Ohio Special Primary or Special General Elections by the close of books for the applicable report(s). (See charts below for the closing date for each report.)

Committees filing monthly that make contributions or expenditures in connection with the Ohio Special Primary or Special General Elections will continue to file according to the monthly reporting schedule.

Additional disclosure information in connection with the Ohio Special Elections may be found on the FEC Web site at *http://www.fec.gov/info/report_dates.shtml.*

Disclosure of Lobbyist Bundling Activity

Principal campaign committees, party committees and Leadership PACs that are otherwise required to file reports in connection with the special elections must simultaneously file FEC Form 3L if they receive two or more bundled contributions from lobbyists/registrants or lobbyist/registrant PACs that aggregate in excess of the lobbyist bundling disclosure threshold during the special election reporting periods. (See charts below for closing date of each period.) 11 CFR 104.22(a)(5)(v), (b).

The lobbyist bundling disclosure threshold for calendar year 2015 is $17,600. This threshold amount may change in 2016 based upon the annual cost of living adjustment (COLA). As soon as the adjusted threshold amount is available, the Commission will publish it in the **Federal Register** and post it on its Web site. 11 CFR 104.22(g) and 110.7(e)(2). For more information on these requirements, see **Federal Register** Notice 2009–03, 74 FR 7285 (February 17, 2009).

CALENDAR OF REPORTING DATES FOR OHIO SPECIAL ELECTIONS COMMITTEES INVOLVED IN ONLY THE SPECIAL PRIMARY (03/15/16) MUST FILE

Report	Close of books [1]	Reg./cert. & overnight mailing deadline	Filing deadline
Pre-Primary	02/24/16	02/29/16	03/03/16
April Quarterly	03/31/16	04/15/16	04/15/16

COMMITTEES INVOLVED IN BOTH THE SPECIAL PRIMARY (03/15/16) AND SPECIAL GENERAL (06/07/16) MUST FILE

Report	Close of books [1]	Reg./Cert. & overnight mailing deadline	Filing deadline
Pre-Primary	02/24/16	02/29/16	03/03/16
April Quarterly	03/31/16	04/15/16	04/15/16
Pre-General	05/18/16	05/23/16	05/26/16
Post-General	06/27/16	07/07/16	07/07/16
July Quarterly	.....	—WAIVED—	.....
October Quarterly	09/30/16	10/15/16	10/15/16

COMMITTEES INVOLVED IN ONLY THE SPECIAL GENERAL (06/07/16) MUST FILE

Report	Close of books [1]	Reg./cert. & overnight mailing deadline	Filing deadline
Pre-General	05/18/16	05/23/16	05/26/16
Post-General	06/27/16	07/07/16	07/07/16
July Quarterly	.....	—WAIVED—	.....
October Quarterly	09/30/16	10/15/16	10/15/16

[1] The reporting period always begins the day after the closing date of the last report filed. If the committee is new and has not previously filed a report, the first report must cover all activity that occurred before the committee registered as a political committee up through the close of books for the first report due.

On behalf of the Commission.

Dated: December 9, 2015.

Ann M. Ravel,

Chair, Federal Election Commission.

[FR Doc. 2015–31545 Filed 12–15–15; 8:45 am]

BILLING CODE 6715–01–P

FEDERAL RESERVE SYSTEM

Change in Bank Control Notices; Acquisitions of Shares of a Bank or Bank Holding Company

The notificants listed below have applied under the Change in Bank Control Act (12 U.S.C. 1817(j)) and § 225.41 of the Board's Regulation Y (12 CFR 225.41) to acquire shares of a bank or bank holding company. The factors that are considered in acting on the notices are set forth in paragraph 7 of the Act (12 U.S.C. 1817(j)(7)).

The notices are available for immediate inspection at the Federal Reserve Bank indicated. The notices also will be available for inspection at the offices of the Board of Governors. Interested persons may express their views in writing to the Reserve Bank indicated for that notice or to the offices of the Board of Governors. Comments must be received not later than December 31, 2015.

A. Federal Reserve Bank of St. Louis (Yvonne Sparks, Community Development Officer) P.O. Box 442, St. Louis, Missouri 63166–2034:

1. *Joel A. Montgomery, Jr., St. Louis, Missouri, as trustee, of the RHM IV 2015 Irrevocable Bank Trust, WJM 2015 Irrevocable Bank Trust, JMF 2015 Irrevocable Bank Trust, and the JAMJR 2015 Irrevocable Bank Trust; and Richard H. Montgomery III, Sikeston, Missouri, as trustee, of the MMM 2015 Irrevocable Bank Trust and RHM III 2015 Irrevocable Bank Trust,* to retain and acquire additional voting shares of Montgomery Bancorporation, Inc., and thereby indirectly retain and acquire additional voting shares of Montgomery Bank, N.A., both in Sikeston, Missouri.

Board of Governors of the Federal Reserve System, December 11, 2015.

Margaret McCloskey Shanks,

Deputy Secretary of the Board.

[FR Doc. 2015–31601 Filed 12–15–15; 8:45 am]

BILLING CODE 6210–01–P

FEDERAL RESERVE SYSTEM

Formations of, Acquisitions by, and Mergers of Bank Holding Companies

The companies listed in this notice have applied to the Board for approval, pursuant to the Bank Holding Company Act of 1956 (12 U.S.C. 1841 *et seq.*) (BHC Act), Regulation Y (12 CFR part 225), and all other applicable statutes and regulations to become a bank holding company and/or to acquire the assets or the ownership of, control of, or the power to vote shares of a bank or bank holding company and all of the banks and nonbanking companies owned by the bank holding company, including the companies listed below.

The applications listed below, as well as other related filings required by the Board, are available for immediate inspection at the Federal Reserve Bank indicated. The applications will also be available for inspection at the offices of the Board of Governors. Interested persons may express their views in writing on the standards enumerated in the BHC Act (12 U.S.C. 1842(c)). If the proposal also involves the acquisition of a nonbanking company, the review also includes whether the acquisition of the nonbanking company complies with the standards in section 4 of the BHC Act (12 U.S.C. 1843). Unless otherwise noted, nonbanking activities will be conducted throughout the United States.

Unless otherwise noted, comments regarding each of these applications must be received at the Reserve Bank indicated or the offices of the Board of Governors not later than January 11, 2016.

A. Federal Reserve Bank of Minneapolis (Jacquelyn K. Brunmeier, Assistant Vice President) 90 Hennepin Avenue, Minneapolis, Minnesota 55480–0291:

1. *Bank Forward Employee Stock Ownership Plan and Trust,* Fargo, North Dakota, to become a bank holding company, by retaining at least 25 percent of the voting shares of Security State Bank Holding Company, Fargo, North Dakota, and thereby indirectly retain voting shares of Bank Forward, Hannaford, North Dakota.

In connection with this application, Security State Bank Holding Company and Bank Forward Employee Stock Ownership Plan and Trust, through Bank Forward have also applied to engage in extending credit and servicing loans, pursuant to section 225.28(b)(1).

Board of Governors of the Federal Reserve System, December 11, 2015.

Margaret McCloskey Shanks,

Deputy Secretary of the Board.

[FR Doc. 2015–31600 Filed 12–15–15; 8:45 am]

BILLING CODE 6210–01–P

DEPARTMENT OF DEFENSE

GENERAL SERVICES ADMINISTRATION

NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

[OMB Control No. 9000–0101; Docket 2015–0055; Sequence 32]

Information Collection; Drug-Free Workplace

AGENCY: Department of Defense (DOD), General Services Administration (GSA), and National Aeronautics and Space Administration (NASA).

ACTION: Notice of request for public comments regarding an extension of an existing OMB clearance.

SUMMARY: Under the provisions of the Paperwork Reduction Act, the Regulatory Secretariat Division will be submitting to the Office of Management and Budget (OMB) a request to review and approve an extension of a previously approved information collection requirement concerning drug-free workplace.

DATES: Submit comments on or before February 16, 2016.

ADDRESSES: Submit comments identified by Information Collection 9000–0101, Drug-Free Workplace, by any of the following methods:

- *Regulations.gov: http://www.regulations.gov.* Submit comments via the Federal eRulemaking portal by searching the OMB control number. Select the link ''Submit a Comment'' that corresponds with ''Information Collection 9000–0101, Drug-Free Workplace''. Follow the instructions provided at the ''Submit a Comment'' screen. Please include your name, company name (if any), and ''Information Collection 9000–0101, Drug-Free Workplace'' on your attached document.
- *Mail:* General Services Administration, Regulatory Secretariat Division (MVCB), 1800 F Street NW., Washington, DC 20405. ATTN: Ms. Flowers/IC 9000–0101, Drug-Free Workplace.

Instructions: Please submit comments only and cite Information Collection 9000–0101, Drug-Free Workplace, in all correspondence related to this collection. Comments received generally will be posted without change to *http://www.regulations.gov*, including any personal and/or business confidential information provided. To confirm receipt of your comment(s), please check *www.regulations.gov*, approximately two to three days after submission to verify posting (except allow 30 days for posting of comments submitted by mail).

FOR FURTHER INFORMATION CONTACT: Mr. Charles Gray, Procurement Analyst, Office of Acquisition Policy, GSA 202–208–6726 or email *charles.gray@gsa.gov.*

SUPPLEMENTARY INFORMATION:

A. Purpose

FAR clause 52.223–6, Drug-Free Workplace, requires (1) contractor employees to notify their employer of any criminal drug statute conviction for a violation occurring in the workplace; and (2) Government contractors, after receiving notice of such conviction, to notify the contracting officer. The clause is not applicable to commercial items, contracts at or below simplified acquisition threshold (unless awarded to an individual), and contracts performed outside the United States or by law enforcement agencies. The clause implements the Drug-Free Workplace Act of 1988 (Pub. L. 100–690).

The information provided to the Government is used to determine contractor compliance with the statutory requirements to maintain a drug-free workplace.

B. Annual Reporting Burden

Respondents: 598.
Responses per Respondent: 1.
Annual Responses: 598.
Hours per Response: .5.
Total Burden Hours: 299.

C. Public Comments

Public comments are particularly invited on: Whether this collection of information is necessary for the proper performance of functions of the Federal Acquisition Regulations (FAR), and whether it will have practical utility; whether our estimate of the public burden of this collection of information is accurate, and based on valid assumptions and methodology; ways to enhance the quality, utility, and clarity of the information to be collected; and ways in which we can minimize the burden of the collection of information on those who are to respond, through the use of appropriate technological collection techniques or other forms of information technology.

Obtaining Copies of Proposals: Requesters may obtain a copy of the information collection documents from the General Services Administration, Regulatory Secretariat Division (MVCB), 1800 F Street NW., Washington, DC 20405, telephone 202–501–4755.

Please cite OMB Control No. 9000–0101, Drug-Free Workplace, in all correspondence.

Edward Loeb,

Acting Director, Federal Acquisition Policy Division, Office of Governmentwide Acquisition Policy, Office of Acquisition Policy, Office of Governmentwide Policy.

[FR Doc. 2015–31561 Filed 12–15–15; 8:45 am]

BILLING CODE 6820–EP–P

DEPARTMENT OF DEFENSE

GENERAL SERVICES ADMINISTRATION

NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

[OMB Control No. 9000–0083; Docket 2015–0055; Sequence 31]

Information Collection; Qualification Requirements

AGENCY: Department of Defense (DOD), General Services Administration (GSA), and National Aeronautics and Space Administration (NASA).

ACTION: Notice of request for comments regarding the extension of a previously existing OMB clearance.

SUMMARY: Under the provisions of the Paperwork Reduction Act, the Regulatory Secretariat Division will be submitting to the Office of Management and Budget (OMB) a request to review and approve an extension of a previously approved information collection requirement concerning Qualification Requirements.

DATES: Submit comments on or before February 16, 2016.

ADDRESSES: Submit comments identified by Information Collection 9000–0083, Qualification Requirements, by any of the following methods:

- *Regulations.gov: http://www.regulations.gov.* Submit comments via the Federal eRulemaking portal by searching the OMB control number. Select the link ''Submit a Comment'' that corresponds with ''Information Collection 9000–0083, Qualification Requirements''. Follow the instructions provided at the ''Submit a Comment'' screen. Please include your name, company name (if any), and ''Information Collection 9000–0083, Qualification Requirements'' on your attached document.
- *Mail:* General Services Administration, Regulatory Secretariat Division (MVCB), 1800 F Street NW., Washington, DC 20405. ATTN: Ms. Flowers/IC 9000–0083, Qualification Requirements.

Instructions: Please submit comments only and cite Information Collection 9000–0083, Qualification Requirements, in all correspondence related to this collection. Comments received generally will be posted without change to *http://www.regulations.gov,* including any personal and/or business confidential information provided. To confirm receipt of your comment(s), please check *www.regulations.gov,* approximately two to three days after submission to verify posting (except allow 30 days for posting of comments submitted by mail).

FOR FURTHER INFORMATION CONTACT: Mr. Charles Gray, Procurement Analyst, Office of Governmentwide Acquisition Policy, GSA, 703–795–6328 or *charles.gray@gsa.gov.*

SUPPLEMENTARY INFORMATION:

A. Purpose

FAR subpart 9.2 and the associated clause at FAR 52.209–1, implement the statutory requirements of 10 U.S.C. 2319 and 41 U.S.C. 3311, which allow an agency to establish a qualification requirement for testing or other quality assurance demonstration that must be completed by an offeror before award of a contract. Under the qualification requirements, an end item, or a component thereof, may be required to be prequalified.

The clause at FAR 52.209–1, Qualification Requirements, requires offerors who have met the qualification requirements to identify the offeror's name, the manufacturer's name, source's name, the item name, service identification, and test number (to the extent known). This eliminates the need for an offeror to provide new information when the offeror, manufacturer, source, product or service covered by qualification requirement has already met the standards specified by an agency in a solicitation.

The contracting officer uses the information to determine eligibility for award when the clause at 52.209–1 is included in the solicitation. Alternatively, items not yet listed may be considered for award upon the submission of evidence of qualification with the offer.

B. Annual Reporting Burden

Respondents: 9,693.
Responses per Respondent: 5.
Annual Responses: 48,465.
Hours per Response: 1.0.
Total Burden Hours: 48,465.

C. Public Comments

Public comments are particularly invited on: Whether this collection of information is necessary; whether it will have practical utility; whether our estimate of the public burden of this collection of information is accurate, and based on valid assumptions and methodology; ways to enhance the quality, utility, and clarity of the information to be collected; and ways in which we can minimize the burden of the collection of information on those who are to respond, through the use of appropriate technological collection techniques or other forms of information technology.

Obtaining Copies of Proposals: Requesters may obtain a copy of the information collection documents from the General Services Administration, Regulatory Secretariat Division (MVCB), 1800 F Street NW., Washington, DC 20405, telephone 202–501–4755.

Please cite OMB Control No. 9000–0083, Qualification Requirements, in all correspondences.

Edward Loeb,

Acting Director, Federal Acquisition Policy Division, Office of Governmentwide Acquisition Policy, Office of Acquisition Policy, Office of Governmentwide Policy.

[FR Doc. 2015–31560 Filed 12–15–15; 8:45 am]

BILLING CODE 6820–EP–P

DEPARTMENT OF DEFENSE

GENERAL SERVICES ADMINISTRATION

NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

[Docket 2015–0055; Sequence 16; OMB Control No. 9000–0107]

Submission for OMB Review; Notice of Radioactive Materials

AGENCIES: Department of Defense (DOD), General Services Administration (GSA), and National Aeronautics and Space Administration (NASA).

ACTION: Notice of request for comments regarding the extension of a previously existing OMB clearance.

SUMMARY: Under the provisions of the Paperwork Reduction Act, the Regulatory Secretariat Division will be submitting to the Office of Management and Budget (OMB) a request to review and approve an extension of a previously approved information collection requirement concerning Notice of Radioactive Materials. A

notice was published in the **Federal Register** at 80 FR 58253 on September 28, 2015. No comments were received.

DATES: Submit comments on or before January 15, 2016.

ADDRESSES: Submit comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden to: Office of Information and Regulatory Affairs of OMB, Attention: Desk Officer for GSA, Room 10236, NEOB, Washington, DC 20503. Additionally submit a copy to GSA by any of the following methods:

- *Regulations.gov: http://www.regulations.gov.* Submit comments via the Federal eRulemaking portal by searching the OMB control number. Select the link ''Submit a Comment'' that corresponds with ''Information Collection 9000–0107, Notice of Radioactive Materials''. Follow the instructions provided at the ''Submit a Comment'' screen. Please include your name, company name (if any), and ''Information Collection 9000–0107, Notice of Radioactive Materials'' on your attached document.
- *Mail:* General Services Administration, Regulatory Secretariat Division (MVCB), 1800 F Street NW., Washington, DC 20405. ATTN: Ms. Flowers/IC 9000–0107, Notice of Radioactive Materials.

Instructions: Please submit comments only and cite Information Collection 9000–0107, Notice of Radioactive Materials, in all correspondence related to this collection. Comments received generally will be posted without change to *http://www.regulations.gov,* including any personal and/or business confidential information provided. To confirm receipt of your comment(s), please check *www.regulations.gov,* approximately two to three days after submission to verify posting (except allow 30 days for posting of comments submitted by mail).

FOR FURTHER INFORMATION CONTACT: Mr. Charles Gray, Procurement Analyst, Office of Acquisition Policy, GSA, 703–795–6328 or email *charles.gray@gsa.gov.*

A. Purpose

The clause at FAR 52.223–7, Notice of Radioactive Materials, requires contractors to notify the Government prior to delivery of items containing radioactive materials. The purpose of the notification is to alert receiving activities that appropriate safeguards may need to be instituted. The notice shall specify the part or parts of the items which contain radioactive materials, a description of the materials, the name and activity of the isotope, the manufacturer of the materials, and any other information known to the contractor which will put users of the items on notice as to the hazards involved.

B. Annual Reporting Burden

Respondents: 535.
Responses per Respondent: 5.
Annual Responses: 2,675.
Hours per Response: 1.
Total Burden Hours: 2,675.

C. Public Comments

Public comments are particularly invited on: Whether this collection of information is necessary for the proper performance of functions of the FAR, and whether it will have practical utility; whether our estimate of the public burden of this collection of information is accurate, and based on valid assumptions and methodology; ways to enhance the quality, utility, and clarity of the information to be collected; and ways in which we can minimize the burden of the collection of information on those who are to respond, through the use of appropriate technological collection techniques or other forms of information technology.

Obtaining Copies of Proposals: Requesters may obtain a copy of the information collection documents from the General Services Administration, Regulatory Secretariat Division (MVCB), 1800 F Street NW., Washington, DC 20405, telephone 202–501–4755. Please cite OMB Control No. 9000–0107,

Notice of Radioactive Materials, in all correspondence.

Edward Loeb,

Acting Director, Federal Acquisition Policy Division, Office of Governmentwide Acquisition Policy, Office of Acquisition Policy, Office of Governmentwide Policy.

[FR Doc. 2015–31562 Filed 12–15–15; 8:45 am]

BILLING CODE 6820–EP–P

DEPARTMENT OF HEALTH AND HUMAN SERVICES

Agency for Toxic Substances and Disease Registry

Centers for Disease Control and Prevention

[30Day–16–0048]

Agency Forms Undergoing Paperwork Reduction Act Review

The Centers for Disease Control and Prevention (CDC) has submitted the following information collection request to the Office of Management and Budget (OMB) for review and approval in accordance with the Paperwork Reduction Act of 1995. The notice for the proposed information collection is published to obtain comments from the public and affected agencies.

Written comments and suggestions from the public and affected agencies concerning the proposed collection of information are encouraged. Your comments should address any of the following: (a) Evaluate whether the proposed collection of information is necessary for the proper performance of the functions of the agency, including whether the information will have practical utility; (b) Evaluate the accuracy of the agencies estimate of the burden of the proposed collection of information, including the validity of the methodology and assumptions used; (c) Enhance the quality, utility, and clarity of the information to be collected; (d) Minimize the burden of the collection of information on those who are to respond, including through the use of appropriate automated, electronic, mechanical, or other technological collection techniques or other forms of information technology, *e.g.,* permitting electronic submission of responses; and (e) Assess information collection costs.

To request additional information on the proposed project or to obtain a copy of the information collection plan and instruments, call (404) 639–7570 or send an email to *omb@cdc.gov.* Direct written comments and/or suggestions regarding the items contained in this notice to the Attention: CDC Desk Officer, Office of Management and Budget, Washington, DC 20503 or by fax to (202) 395–5806. Written comments should be received within 30 days of this notice.

Proposed Project

ATSDR Exposure Investigations (EIs) (OMB Control No. 0923–0048, Expiration Date 5/31/2016)—Extension—Agency for Toxic Substances and Disease Registry (ATSDR).

Background and Brief Description

The Agency for Toxic Substances and Disease Registry (ATSDR) is requesting a three-year extension of this generic clearance to allow the agency to conduct exposure investigations (EIs), through methods developed by ATSDR. After a chemical release or suspected release into the environment, EIs are usually requested by officials of a state health agency, county health departments, the Environmental Protection Agency (EPA), the general public, and ATSDR staff.

EI results are used by public health professionals, environmental risk managers, and other decision makers to determine if current conditions warrant intervention strategies to minimize or eliminate human exposure. For example, three of the EIs that ATSDR conducted in the past three years include the Colorado Smelter (CO—blood lead and urine arsenic), ASARCO Hayden Smelter Site (AZ—blood lead and urine arsenic), and Decatur (AL—perfluorochemicals [PFCs] in serum).

Example 1: Colorado Smelter Blood Lead and Urine Arsenic Sampling, CO

The site is a former smelter located in Pueblo, Colorado. Past sampling found elevated levels of lead and arsenic in residential soils and a slag pile associated with the smelter. ATSDR sampled blood lead levels (BLLs) in children and adults and found seven children that had BLLs near or exceeding the level of 5 micrograms per deciliter (mg/dL)(a level identified by ATSDR as a level of concern for lead effects in children). One adult had an elevated level of arsenic in their urine. Speciation of the sample determined that it was primarily organic arsenic, probably resulting from eating seafood.

- The local health department conducted a Healthy Homes Inspection for these families having children with elevated BLLs and ATSDR recommended that the children follow up with their primary care provider.
- On June 10, 2014, the local health department obtained a six year grant from the EPA Region 8 to conduct health education, BLL screening, assist in the coordination of developmental and cognitive evaluations in affected children from a designated area of Pueblo, and conduct other public health actions/investigations as stipulated in the grant.
- On December 11, 2014, EPA listed the Colorado Smelter site on the National Priority List (NPL).

Example 2: ASARCO Hayden Smelter Site, AZ

The community is located in the vicinity of the ASARCO Hayden Smelter, which has been operating for 100 years as a copper ore processer. The processing has resulted in lead and arsenic contamination in the surrounding residential area and in tailing piles used for recreation. Limited sampling of the community in the past found elevated BLLs and arsenic in urine. Based on community concerns, EPA requested that ATSDR conduct an EI to assess potential exposure of the community to lead and arsenic.

- In April, 2015, ATSDR collected 83 BLL and 58 urine arsenic samples from the community.
- Participants have been notified of their results and the EI report is being prepared.

Example 3: Perfluorochemical Serum Sampling, Decatur, AL

Perfluorochemicals (PFC) are a class of organofluorine compounds that are used in a variety of industrial and consumer products including fire-fighting foams; personal care and cleaning products; and oil, stain, grease, and water repellent coatings. These coatings are used on carpet, textiles, leather, ''non-stick'' cookware, and paper wrappers used on fast food items. As a result, United States (U.S.) general population exposure to PFCs is common.

In 2007, PFCs were released by a chemical manufacturer near Decatur, AL, and impacted environmental media in the area. In 2010, ATSDR conducted an EI to assess exposure of residents to PFCs in blood. PFCs were found in the serum of people that regularly used the public water system in the area as their primary drinking water source.

Recommendations of the EI included continued monitoring for PFCs in the public water supply and continued biological PFC testing in the community to determine if PFCs in the community had been reduced.

Based on the results of the 2010 EI, ATSDR is preparing to conduct another EI at the site in 2016 (approved by OMB on 8/10/2015), including biological sampling of serum and urine to:

- Compare individuals' current serum PFC concentrations with their 2010 serum PFC concentrations.
- Compare individuals' serum PFC concentrations to the national population reference values (NHANES 2011–2012).
- Calculate the biological half-life for each PFC species using paired blood and urine PFC concentrations to improve the understanding of the pharmacokinetic behavior of these compounds in humans.
- Evaluate the potential existence of non-drinking water PFC exposure pathways through physiologically-based pharmacokinetic (PBPK) modeling.

All of ATSDR's targeted biological assessments (*e.g.,* urine, blood) and some of the environmental investigations (*e.g.,* air, water, soil, or food sampling) involve participants to determine whether they are or have been exposed to unusual levels of pollutants at specific locations (*e.g.,* where people live, spend leisure time, or anywhere they might come into contact with contaminants under investigation).

Questionnaires, appropriate to the specific contaminant, are generally needed in about half of the EIs (at most approximately 12 per year) to assist in interpreting the biological or environmental sampling results. ATSDR collects contact information (*e.g.,* name, address, phone number) to provide the participant with their individual results. ATSDR also collects information on other possible confounding sources of chemical(s) exposure such as medicines taken, foods eaten, hobbies, jobs, etc. In addition, ATSDR asks questions on recreational or occupational activities that could increase a participant's exposure potential. That information represents an individual's exposure history.

The number of questions can vary depending on the number of chemicals being investigated, the route of exposure (*e.g.,* breathing, eating, touching), and number of other sources of the chemical(s) (*e.g.,* products used, jobs). We use approximately 12–20 questions about the pertinent environmental exposures per investigation. Typically, the number of participants in an individual EI ranges from 10 to 100. Participation is completely voluntary, and there are no costs to participants other than their time. Based on a maximum of 12 EIs per year and 100 participants each, the estimated annualized burden hours are 600.

ESTIMATED ANNUALIZED BURDEN HOURS

Type of respondents	Form name	Number of respondents	Number of responses per respondent	Average burden per response (in hrs.)
Exposure Investigation Participants	Chemical Exposure Questions	1,200	1	30/60

Leroy A. Richardson,

Chief, Information Collection Review Office, Office of Scientific Integrity, Office of the Associate Director for Science, Office of the Director, Centers for Disease Control and Prevention.

[FR Doc. 2015–31581 Filed 12–15–15; 8:45 am]

BILLING CODE 4163–18–P

DEPARTMENT OF HEALTH AND HUMAN SERVICES

Health Resources and Services Administration

Agency Information Collection Activities: Submission to OMB for Review and Approval; Public Comment Request

AGENCY: Health Resources and Services Administration, HHS.

ACTION: Notice.

SUMMARY: In compliance with Section 3507(a)(1)(D) of the Paperwork Reduction Act of 1995, the Health Resources and Services Administration (HRSA) has submitted an Information Collection Request (ICR) to the Office of Management and Budget (OMB) for review and approval. Comments submitted during the first public review of this ICR will be provided to OMB. OMB will accept further comments from the public during the review and approval period.

DATES: Comments on this ICR should be received no later than January 15, 2016.

ADDRESSES: Submit your comments, including the Information Collection Request Title, to the desk officer for HRSA, either by email to *OIRA_submission@omb.eop.gov* or by fax to 202–395–5806.

FOR FURTHER INFORMATION CONTACT: To request a copy of the clearance requests submitted to OMB for review, email the HRSA Information Collection Clearance Officer at *paperwork@hrsa.gov* or call (301) 443–1984.

SUPPLEMENTARY INFORMATION:

Information Collection Request Title: Shortage Designation Management System

OMB No. 0915–xxxx—NEW

Abstract: HRSA's Bureau of Health Workforce (BHW) is committed to improving the health of the nation's underserved communities and vulnerable populations by developing, implementing, evaluating, and refining programs that strengthen the nation's health workforce. The Department of Health and Human Services relies on two federal shortage designations to identify and dedicate resources to areas and populations in greatest need of providers: Health Professional Shortage Area (HPSA) designations and Medically Underserved Area/Medically Underserved Population (MUA/P) designations. HPSA designations are geographic areas, population groups, and facilities that are experiencing a shortage of health professionals. MUA/P designations are areas, or populations within areas, that are experiencing a shortage of health care services. MUAs are designated for the entire population of a particular geographic area. MUP designations are limited to particular groups of underserved people within an area. These designations are currently used in a number of Departmental programs that provide both federal and state government grant/program benefits for communities, health care facilities, and providers. BHW has the responsibility for designating and de-designating HPSAs and MUA/Ps on behalf of the Secretary.

HPSA designations are required to be reviewed and updated annually to reflect current data. Individual states—through their Primary Care Office (PCO)—have primary responsibility for initiating an application for a new or updated HPSA designation, or withdrawing HPSAs that no longer meet the designation criteria. HRSA reviews the application and makes the final determination on the HPSA designation. Requests come from the PCOs who have access to the online application and review system, Shortage Designation Management System (SDMS). Requests that come from other sources are referred to the PCOs for their review and concurrence. In addition, interested parties, including the Governor, the State Primary Care Association, and state professional associations are notified of each request submitted for their comments and recommendations.

In order to obtain a federal shortage designation for an area, population, or facility, PCOs must submit a shortage designation application through SDMS for review and approval by BHW. Both the HPSA and MUA/P applications request local, state, and national data on the population that is experiencing a shortage of health professionals and the number of health professionals relative to the population covered by the proposed designation. The information collected on the applications is used to determine which areas, populations, and facilities have shortages.

The lists of designated HPSAs are annually published in the **Federal Register**. In addition, lists of HPSAs are updated on the HRSA Web site, *http://www.hrsa.gov/shortage/,* so that interested parties can access the information.

Need and Proposed Use of the Information: The need and purpose of this information collection is to obtain information to designate HPSAs and MUA/Ps. The information obtained from the SDMS is used to determine which areas, populations, and facilities have critical shortages of health professionals. The SDMS HPSA application and SDMS MUA/P application are used for these designation determinations. Applicants must submit a SDMS application to BHW to obtain a federal shortage designation. The application asks for local, state, and national data required for determining the application's eligibility to obtain a federal shortage designation. In addition, applicants must enter detailed information explaining how the area, population, or facility faces a critical shortage of health professionals.

Likely Respondents: State PCOs interested in obtaining a primary care, dental, or mental HPSA designation or a MUA/P in their state.

Burden Statement: Burden in this context means the time expended by persons to generate, maintain, retain, disclose or provide the information requested. This includes the time needed to review instructions; to develop, acquire, install and utilize technology and systems for the purpose of collecting, validating and verifying information, processing and maintaining information, and disclosing and providing information; to train personnel and to be able to respond to a collection of information; to search data sources; to complete and review the collection of information; and to transmit or otherwise disclose the information. The total annual burden hours estimated for this ICR are summarized in the table below.

TOTAL ESTIMATED ANNUALIZED BURDEN—HOURS

Form name	Number of respondents	Number of responses per respondent	Total responses	Average burden per response (in hours)	Total burden hours
Designation Planning and Preparation	54	57	3,078	23.40	72,025.20
SDMS Application	54	57	3,078	11.33	34,873.74
Total	54	57	3,078	34.73	106,898.94

Jackie Painter,

Director, Division of the Executive Secretariat.

[FR Doc. 2015–31642 Filed 12–15–15; 8:45 am]

BILLING CODE 4165–15–P

DEPARTMENT OF HEALTH AND HUMAN SERVICES

Health Resources and Services Administration

Statement of Organization, Functions and Delegations of Authority

This notice amends Part R of the Statement of Organization, Functions and Delegations of Authority of the Department of Health and Human Services (HHS), Health Resources and Services Administration (HRSA) (60 FR 56605, as amended November 6, 1995; as last amended at 80 FR 66545–66546 dated October 29, 2015).

This notice reflects organizational changes in the Health Resources and Services Administration (HRSA), Office of the Administrator (RA), Office of Planning, Analysis and Evaluation (RA5) and the Bureau of Health Workforce (RQ). Specifically, this notice: (1) Establishes the Office of Global Health (RAI) within the Office of the Administrator (RA); (2) transfers the function of the Office of Global Health Affairs (RQA1) from the Bureau of Health Workforce to the Office of the Administrator (RA); (3) transfers the Border Health function from the Office of External Engagement (RA57) within the Office of Planning, Analysis and Evaluation (RA5) to the Office of Global Health (RAI); (4) abolishes the Office of Global Health Affairs (RQA1) within the Bureau of Health Workforce (RQ); and (5) updates the functional statement for the Bureau of Health Workforce (RQ), Office of Planning, Analysis and Evaluation (OPAE) and the Office of the Administrator (RA).

Chapter RA—Office of the Administrator (RA)

Section RA–10, Organization

Delete the organizational structure for the Office of the Administrator (RA) and replace in its entirety.

The Office of the Administrator is headed by the Administrator, who reports directly to the Secretary, Department of Health and Human Services.

(1) Immediate Office of the Administrator (RA);
(2) Office of Legislation (RAE);
(3) Office of Communications (RA6);
(4) Office of Health Equity (RAB);
(5) Office of Equal Opportunity, Civil Rights, and Diversity Management (RA2);
(6) Office of Planning, Analysis and Evaluation (RA5);
(7) Office of Women's Health (RAW); and
(8) Office of Global Health (RAI).

Section RA–20, Functions

This notice reflects organizational changes in the Health Resources and Services Administration (HRSA), Office of the Administrator (RA), Office of Planning, Analysis and Evaluation (RA5). Specifically, this notice: (1) Transfers the function of the Office of Global Health Affairs (RQA1) to the Office of the Administrator (RA); (2) transfers the Border Health function from the Office of External Engagement (RA57) within the Office of Planning, Analysis and Evaluation (RA5) to the Office of Global Health (RAI); and (3) updates the functional statement for the Bureau of Health Workforce (RQ), the Office of Planning, Analysis and Evaluation (RA5) and the Office of the Administrator (RA).

Office of the Administrator (RA)

(1) Leads and directs programs and activities of the Agency and advises the Office of the Secretary of Health and Human Services on policy matters concerning them; (2) provides consultation and assistance to senior Agency officials and others on clinical and health professional issues; (3) serves as the Agency's focal point on efforts to strengthen the practice of public health as it pertains to the HRSA mission; (4) establishes and maintains verbal and written communications with health organizations in the public and private sectors to support the mission of HRSA; (5) coordinates the Agency's strategic, evaluation and research planning processes; (6) manages the legislative and communications programs for the Agency; (7) administers HRSA's equal opportunity and civil rights activities; (8) provides overall leadership, direction, coordination, and planning in the support of the Agency's special health programs; (9) manages the health, wellness, and safety of women and girls with the support of the Office of Women's Health, through policy, programming and outreach education; and (10) provides leadership within HRSA for the support of global health and coordinates policy development with the HHS Office of Global Affairs, other departmental agencies, bilateral/multilateral organizations, and other international organizations and partners.

Office of Global Health (RAI)

The Office of Global Health serves as the principal advisor to the Administrator on global health issues. Specifically: (1) Provides leadership, coordination, and advancement of global health programs relating to sustainable health systems for vulnerable and at-risk populations and for HRSA training programs; (2) provides support for the agency's international travel and the Department of State's International Visitors Leadership Program; (3) provides management and oversight of international programs aimed at -improving quality and innovation in human resources for health, health professions recruitment, education, faculty development, retention, and applied research systems; (3) provides leadership within HRSA for the support of global health and coordinates policy development with the HHS Office of Global Affairs, other departmental agencies, bilateral/multilateral organizations, and other international organizations and partners; (4) monitors HRSA's border health activities and investments to promote collaboration and improve health care access to those living along the U.S.-Mexico border; and (5) supports and conducts programs

associated with the international migration and recruitment of health personnel, foreign and immigrant health workers, and veterans.

Office of External Engagement (RA57)

(1) Serves as the principal Agency resource for facilitating external engagement; (2) coordinates the Agency's intergovernmental activities; (3) provides the Administrator with a single point of contact on all activities related to important state and local government, stakeholder association, and interest group activities; (4) coordinates Agency cross-Bureau cooperative agreements and activities with organizations such as the National Governors Association, National Conference of State Legislature, Association of State and Territorial Health Officials, National Association of Counties, and National Association of County and City Health Officials; (5) interacts with various commissions such as the Delta Regional Authority, Appalachian Regional Commission, and Denali Commission; (6) serves as the primary liaison to Department intergovernmental staff; and (7) serves as the Agency liaison to manage and coordinate study engagements with the Government Accountability Office and the HHS Office of the Inspector General, Office of Evaluation and Inspections.

Chapter RQ—Bureau of Health Workforce (RQ)

Section RQ–10, Organization

Delete the organizational structure for the Bureau of Health Workforce (RQ) and replace in its entirety.

The Bureau of Health Workforce is headed by the Associate Administrator, who reports directly to the Administrator, Health Resources and Services Administration.

(1) Office of the Associate Administrator (RQ);

(2) Division of Policy and Shortage Designation (RQ1);

(3) Division of Business Operations (RQ2);

(4) Division of External Affairs (RQ3);

(5) Office of Workforce Development and Analysis (RQA);

(6) National Center for Health Workforce Analysis (RQA2);

(7) Division of Medicine and Dentistry (RQA3);

(8) Division of Nursing and Public Health (RQA4);

(9) Division of Practitioner Data Bank (RQA5);

(10) Office of Health Careers (RQB);

(11) Division of Participant Support and Compliance (RQB1);

(12) Division of Health Careers and Financial Support (RQB2);

(13) Division of National Health Service Corps (RQB3); and

(14) Division of Regional Operations (RQB4).

Section RQ–20, Functions

This notice reflects organizational changes in the Health Resources and Services Administration (HRSA), Bureau of Health Workforce (RQ). Specifically, this notice: (1) Transfers the function of the Office of Global Health Affairs (RQA1) to the Office of the Administrator (RA); and (2) updates the functional statement for the Bureau of Health Workforce (RQ) and the Office of the Administrator (RA).

Bureau of Health Workforce (RQ)

The Bureau of Health Workforce (BHW) improves the health of the nation's underserved communities and vulnerable populations by developing, implementing, evaluating, and refining programs that strengthen the nation's health care workforce. BHW programs support a diverse, culturally competent workforce by addressing components including: education and training; recruitment and retention; financial support for students, faculty, and practitioners; supporting institutions; data analysis; and evaluation and coordination of health workforce activities. These efforts support development of a skilled health workforce serving in areas of the nation with the greatest need.

Delegations of Authority

All delegations of authority and re-delegations of authority made to HRSA officials that were in effect immediately prior to this reorganization, and that are consistent with this reorganization, shall continue in effect pending further re-delegation.

This reorganization is effective upon date of signature.

Dated: December 8, 2015.

James Macrae,

Acting Administrator.

[FR Doc. 2015–31594 Filed 12–15–15; 8:45 am]

BILLING CODE 4165–15–P

DEPARTMENT OF HEALTH AND HUMAN SERVICES

[Docket No. FDA–2015–D–3638]

Minutes of Institutional Review Board Meetings: Guidance for Institutions and Institutional Review Boards; Draft Guidance; Extension of the Comment Period

AGENCY: The Office for Human Research Protections, Office of the Assistant Secretary for Health, Office of the Secretary, and the Food and Drug Administration, HHS.

ACTION: Notice of availability; extension of comment period.

SUMMARY: The Office for Human Research Protections (OHRP), Office of the Assistant Secretary for Health, and the Food and Drug Administration (FDA) are extending the comment period for the draft guidance entitled ''Minutes of Institutional Review Board (IRB) Meetings: Guidance for Institutions and IRBs.'' A notice of availability requesting comments on the draft guidance document appeared in the **Federal Register** of November 5, 2015. The Agencies are taking the initiative to extend the comment period for an additional 30 days because the timing of the due date for comments intersects with comment periods on other **Federal Register** documents requiring review by the same group of stakeholders. This extension will allow interested persons additional time to submit comments.

DATES: OHRP and FDA are extending the comment period on the draft guidance entitled ''Minutes of Institutional Review Board (IRB) Meetings: Guidance for Institutions and IRBs.'' Submit either electronic or written comments by February 3, 2016.

ADDRESSES: You may submit comments as follows:

Electronic Submissions

Submit electronic comments in the following way:

- Federal eRulemaking Portal: *http://www.regulations.gov.* Follow the instructions for submitting comments. Comments submitted electronically, including attachments, to *http://www.regulations.gov* will be posted to the docket unchanged. Because your comment will be made public, you are solely responsible for ensuring that your comment does not include any confidential information that you or a third party may not wish to be posted, such as medical information, your or anyone else's Social Security number, or confidential business information, such as a manufacturing process. Please note that if you include your name, contact information, or other information that identifies you in the body of your comments, that information will be posted on *http://www.regulations.gov.*
- If you want to submit a comment with confidential information that you do not wish to be made available to the public, submit the comment as a written/paper submission and in the

manner detailed (see ''Written/Paper Submissions'' and ''Instructions'').

Written/Paper Submissions

Submit written/paper submissions as follows:

- Mail/Hand delivery/Courier (for written/paper submissions): Division of Dockets Management (HFA–305), Food and Drug Administration, 5630 Fishers Lane, Rm. 1061, Rockville, MD 20852.
- For written/paper comments submitted to the Division of Dockets Management, FDA will post your comment, as well as any attachments, except for information submitted, marked and identified, as confidential, if submitted as detailed in ''Instructions.''

Instructions: All submissions received must include the Docket No. FDA–2015–D–3638 for ''Minutes of Institutional Review Board Meetings: Guidance for Institutions and Institutional Review Boards; Draft Guidance; Availability'' publicly viewable at *http://www.regulations.gov* or at the Division of Dockets Management between 9 a.m. and 4 p.m., Monday through Friday.

- Confidential Submissions—To submit a comment with confidential information that you do not wish to be made publicly available, submit your comments only as a written/paper submission. You should submit two copies total. One copy will include the information you claim to be confidential with a heading or cover note that states ''THIS DOCUMENT CONTAINS CONFIDENTIAL INFORMATION.'' The Agency will review this copy, including the claimed confidential information, in its consideration of comments. The second copy, which will have the claimed confidential information redacted/blacked out, will be available for public viewing and posted on *http://www.regulations.gov.* Submit both copies to the Division of Dockets Management. If you do not wish your name and contact information to be made publicly available, you can provide this information on the cover sheet and not in the body of your comments and you must identify this information as ''confidential.'' Any information marked as ''confidential'' will not be disclosed except in accordance with 21 CFR 10.20 and other applicable disclosure law. For more information about FDA's posting of comments to public dockets, see 80 FR 56469, September 18, 2015, or access the information at: *http://www.fda.gov/regulatoryinformation/dockets/default.htm.*

Docket: For access to the docket to read background documents or the electronic and written/paper comments received, go to *http://www.regulations.gov* and insert the docket number, found in brackets in the heading of this document, into the ''Search'' box and follow the prompts and/or go to the Division of Dockets Management, 5630 Fishers Lane, Rm. 1061, Rockville, MD 20852.

FOR FURTHER INFORMATION CONTACT: Janet Donnelly, Office of Good Clinical Practice, Food and Drug Administration, 10903 New Hampshire Ave., Bldg. 32, Rm. 5167, Silver Spring, MD 20993–0002, 301–796–4187; or Irene Stith-Coleman, Office for Human Research Protections, 1101 Wootton Pkwy., Suite 200, Rockville, MD 20852, 240–453–6900.

SUPPLEMENTARY INFORMATION: In the **Federal Register** of November 5, 2015 (80 FR 68545), OHRP and FDA published a notice of availability with a 60-day comment period to request comments on a draft guidance document entitled ''Minutes of Institutional Review Board Meetings: Guidance for Institutions and Institutional Review Boards; Draft Guidance; Availability.'' The Agencies are taking the initiative to extend the comment period for an additional 30 days because the timing of the due date for comments intersects with comment periods on other **Federal Register** documents requiring review by the same group of stakeholders. We believe that a 30-day extension allows adequate time for interested persons to submit comments without significantly delaying finalizing the guidance on these important issues.

Dated: December 9, 2015.

Leslie Kux,

Associate Commissioner for Policy, U.S. Food and Drug Administration.

Dated: December 4, 2015.

Karen B. DeSalvo,

Acting Assistant Secretary for Health, U.S. Department of Health and Human Services.

[FR Doc. 2015–31593 Filed 12–15–15; 8:45 am]

BILLING CODE 4164–01–P

DEPARTMENT OF HEALTH AND HUMAN SERVICES

National Institutes of Health

National Center for Advancing Translational Sciences; Notice of Meetings

Pursuant to section 10(d) of the Federal Advisory Committee Act, as amended (5 U.S.C. App.), notice is hereby given of meetings of the National Center for Advancing Translational Sciences.

The meetings will be open to the public as indicated below, with attendance limited to space available. Individuals who plan to attend and need special assistance, such as sign language interpretation or other reasonable accommodations, should notify the Contact Person listed below in advance of the meeting.

The meetings will be closed to the public in accordance with the provisions set forth in sections 552b(c)(4) and 552b(c)(6), Title 5 U.S.C., as amended. The grant applications and the discussions could disclose confidential trade secrets or commercial property such as patentable material, and personal information concerning individuals associated with the grant applications, the disclosure of which would constitute a clearly unwarranted invasion of personal privacy.

Name of Committee: Cures Acceleration Network Review Board.

Date: January 14, 2016.

Time: 8:30 a.m. to 4:30 p.m.

Agenda: Report from the Institute Director.

Place: National Institutes of Health, Building 31, Conference Room 10, 31 Center Drive, Bethesda, MD 20892.

Contact Person: Anna L. Ramsey-Ewing, Ph.D., Executive Secretary, National Center for Advancing Translational Sciences, 1 Democracy Plaza, Room 1072, Bethesda, MD 20892, 301–435–0809, *anna.ramseyewing@nih.gov.*

Name of Committee: National Center for Advancing Translational Sciences Advisory Council.

Date: January 14, 2016.

Open: 8:30 a.m. to 4:30 p.m.

Agenda: Report from the Institute Director and other staff.

Place: National Institutes of Health, Building 31, Conference Room 10, 31 Center Drive, Bethesda, MD 20892.

Closed: 3:00 p.m. to 4:30 p.m.

Agenda: To review and evaluate grant applications.

Place: National Institutes of Health, Building 31, Conference Room 10, 31 Center Drive, Bethesda, MD 20892.

Contact Person: Anna L. Ramsey-Ewing, Ph.D., Executive Secretary, National Center for Advancing Translational Sciences, 1 Democracy Plaza, Room 1072, Bethesda, MD 20892, 301–435–0809, *anna.ramseyewing@nih.gov.*

In the interest of security, NIH has instituted stringent procedures for entrance onto the NIH campus. All visitor vehicles, including taxicabs, hotel, and airport shuttles will be inspected before being allowed on campus. Visitors will be asked to show one form of identification (for example, a government-issued photo ID, driver's license, or passport) and to state the purpose of their visit.

(Catalogue of Federal Domestic Assistance Program Nos. 93.859, Pharmacology,

Physiology, and Biological Chemistry Research; 93.350, B—Cooperative Agreements; 93.859, Biomedical Research and Research Training, National Institutes of Health, HHS)

Dated: December 10, 2015.

David Clary,

Program Analyst, Office of Federal Advisory Committee Policy.

[FR Doc. 2015–31547 Filed 12–15–15; 8:45 am]

BILLING CODE 4140–01–P

DEPARTMENT OF HEALTH AND HUMAN SERVICES

National Institutes of Health

National Institute of Allergy and Infectious Diseases; Notice of Closed Meeting

Pursuant to section 10(d) of the Federal Advisory Committee Act, as amended (5 U.S.C. App.), notice is hereby given of the following meeting.

The meeting will be closed to the public in accordance with the provisions set forth in sections 552b(c)(4) and 552b(c)(6), Title 5 U.S.C., as amended. The grant applications and the discussions could disclose confidential trade secrets or commercial property such as patentable material, and personal information concerning individuals associated with the grant applications, the disclosure of which would constitute a clearly unwarranted invasion of personal privacy.

Name of Committee: National Institute of Allergy and Infectious Diseases Special Emphasis Panel; NIAID Peer Review Meeting.

Date: January 5, 2016.

Time: 10:00 a.m. to 5:00 p.m.

Agenda: To review and evaluate grant applications.

Place: National Institutes of Health, Room 3F30A, 5601 Fishers Lane, Rockville, MD 20892, (Telephone Conference Call).

Contact Person: Ellen S. Buczko, Ph.D., Scientific Review Officer, Scientific Review Program, Division of Extramural Activities, Room # 3F30A, National Institutes of Health/NIAID, 5601 Fishers Lane, MSC 9823, Bethesda, MD 20892–9823, (240) 669–5028, *ebuczko1@niaid.nih.gov.*

This notice is being published less than 15 days prior to the meeting due to the timing limitations imposed by the review and funding cycle.

(Catalogue of Federal Domestic Assistance Program Nos. 93.855, Allergy, Immunology, and Transplantation Research; 93.856, Microbiology and Infectious Diseases Research, National Institutes of Health, HHS)

Dated: December 10, 2015.

Natasha M. Copeland,

Program Analyst, Office of Federal Advisory Committee Policy.

[FR Doc. 2015–31549 Filed 12–15–15; 8:45 am]

BILLING CODE 4140–01–P

DEPARTMENT OF HEALTH AND HUMAN SERVICES

National Institutes of Health

National Institute of Mental Health; Notice of Meeting

Pursuant to section 10(a) of the Federal Advisory Committee Act, as amended (5 U.S.C. App.), notice is hereby given of an Interagency Autism Coordinating Committee (IACC or Committee) meeting.

The purpose of the IACC meeting is to discuss business, agency updates and issues related to autism spectrum disorder (ASD) research and services activities. The committee will discuss the next update of the IACC Strategic Plan. The meeting will be open to the public and will be accessible by webcast and conference call.

Name of Committee: Interagency Autism Coordinating Committee (IACC).

Type of meeting: Open Meeting.

Date: January 12, 2016.

Time: 9:00 a.m. to 5:00 p.m.* Eastern Time * Approximate end time.

Agenda: To discuss business, updates and issues related to ASD research and services activities. The committee will discuss the next update of the IACC Strategic Plan.

Place: National Institutes of Health, 31 Center Drive, Building 31, C Wing, 6th Floor, Conference Room 6, Bethesda, MD 20892.

Webcast Live: http://videocast.nih.gov/.

Conference Call Access: Dial: 800–988–9744, Access code: 3700810.

Cost: The meeting is free and open to the public.

Registration: Pre-registration is recommended to expedite check-in. Seating in the meeting room is limited to room capacity and on a first come, first served basis. To register, please visit: *www.iacc.hhs.gov.*

Deadlines: Notification of intent to present oral comments: Monday, January 4, 2016 by 5:00 p.m. ET. Submission of written/electronic statement for oral comments: Tuesday, January 5, 2016 by 5:00 p.m. ET. Submission of written comments: Tuesday, January 5, 2016 by 5:00 p.m. ET. For IACC Public Comment guidelines please see: *http://iacc.hhs.gov/public-comment/index.shtml.*

Access: Medical Center Metro Station (Red Line).

Contact Person: Ms. Lina Perez, Office of Autism Research Coordination, National Institute of Mental Health, NIH, 6001 Executive Boulevard, Room 6182A, Bethesda, MD 20892–9669, Phone: 301–443–6040, Email: *IACCPublicInquiries@mail.nih.gov.*

Public Comments

Any member of the public interested in presenting oral comments to the Committee must notify the Contact Person listed on this notice by 5:00 p.m. ET on Monday, January 4, 2016, with their request to present oral comments at the meeting. Interested individuals and representatives of organizations must submit a written/electronic copy of the oral presentation/statement including a brief description of the organization represented by 5:00 p.m. ET on Tuesday, January 5, 2016. Statements submitted will become a part of the public record. Only one representative of an organization will be allowed to present oral comments and presentations will be limited to three to five minutes per speaker, depending on the number of speakers to be accommodated within the allotted time. Speakers will be assigned a time to speak in the order of the date and time when their request to speak is received, along with the required submission of the written/electronic statement by the specified deadline.

In addition, any interested person may submit written public comments to the IACC prior to the meeting by sending the comments to the Contact Person listed on this notice by 5:00 p.m. ET on Tuesday, January 5, 2016. The comments should include the name, address, telephone number and when applicable, the business or professional affiliation of the interested person. NIMH anticipates written public comments received by 5:00 p.m. ET, Tuesday, January 5, 2016 will be presented to the Committee prior to the meeting for the Committee's consideration. Any written comments received after the 5:00 p.m. EST, January 5, 2016 deadline through January 11, 2016 will be provided to the Committee either before or after the meeting, depending on the volume of comments received and the time required to process them in accordance with privacy regulations and other applicable Federal policies. All written public comments and oral public comment statements received by the deadlines for both oral and written public comments will be provided to the IACC for their consideration and will become part of the public record.

In the 2009 IACC Strategic Plan, the IACC listed the ''Spirit of Collaboration'' as one of its core values, stating that, ''We will treat others with respect, listen to diverse views with open minds, discuss submitted public comments, and foster discussions where

participants can comfortably offer opposing opinions.'' In keeping with this core value, the IACC and the NIMH Office of Autism Research Coordination (OARC) ask that members of the public who provide public comments or participate in meetings of the IACC also seek to treat others with respect and consideration in their communications and actions, even when discussing issues of genuine concern or disagreement.

Remote Access

The meeting will be open to the public through a conference call phone number and webcast live on the Internet. Members of the public who participate using the conference call phone number will be able to listen to the meeting but will not be heard. If you experience any technical problems with the webcast or conference call, please send an email to *helpdeskiacc@gmail.com* or by phone at 415–652–8023.

Individuals who participate in person or by using these electronic services and who need special assistance, such as captioning of the conference call or other reasonable accommodations, should submit a request to the Contact Person listed on this notice at least 5 days prior to the meeting.

Security

As part of security procedures, attendees should be prepared to present a photo ID at the meeting registration desk during the check-in process. Pre-registration is recommended. Seating will be limited to the room capacity and seats will be on a first come, first served basis, with expedited check-in for those who are pre-registered.

Meeting schedule subject to change.

Information about the IACC is available on the Web site: *http://www.iacc.hhs.gov.*

Dated: December 10, 2015.

Carolyn Baum,

Program Analyst, Office of Federal Advisory Committee Policy.

[FR Doc. 2015–31621 Filed 12–15–15; 8:45 am]

BILLING CODE 4140–01–P

DEPARTMENT OF HEALTH AND HUMAN SERVICES

National Institutes of Health

National Institute on Deafness and Other Communication Disorders; Notice of Closed Meetings

Pursuant to section 10(d) of the Federal Advisory Committee Act, as amended (5 U.S.C. App.), notice is hereby given of the following meetings.

The meetings will be closed to the public in accordance with the provisions set forth in sections 552b(c)(4) and 552b(c)(6), Title 5 U.S.C., as amended. The grant applications and the discussions could disclose confidential trade secrets or commercial property such as patentable material, and personal information concerning individuals associated with the grant applications, the disclosure of which would constitute a clearly unwarranted invasion of personal privacy.

Name of Committee: National Institute on Deafness and Other Communication Disorders Special Emphasis Panel; NIDCD Review of Applications on Open Design Tools for Speech Signal Processing (R01).

Date: January 13, 2016.

Time: 11:00 a.m. to 1:00 p.m.

Agenda: To review and evaluate grant applications.

Place: National Institutes of Health, Neuroscience Center, 6001 Executive Boulevard, Rockville, MD 20852 (Telephone Conference Call).

Contact Person: Shiguang Yang, DVM, Ph.D., Scientific Review Officer, Division of Extramural Activities, NIDCD, NIH, 6001 Executive Blvd., Room 8349, Bethesda, MD 20892, 301–496–8683, *yangshi@nidcd.nih.gov.*

Name of Committee: National Institute on Deafness and Other Communication Disorders Special Emphasis Panel; NIDCD SBIR Review of Applications on Open Design Tools for Speech Signal Processing.

Date: January 14, 2016.

Time: 11:00 a.m. to 2:00 p.m.

Agenda: To review and evaluate grant applications.

Place: National Institutes of Health, Neuroscience Center, 6001 Executive Boulevard, Rockville, MD 20852 (Telephone Conference Call).

Contact Person: Shiguang Yang, DVM, Ph.D., Scientific Review Officer, Division of Extramural Activities, NIDCD, NIH, 6001 Executive Blvd., Room 8349, Bethesda, MD 20892, 301–496–8683, *yangshi@nidcd.nih.gov.*

Name of Committee: National Institute on Deafness and Other Communication Disorders Special Emphasis Panel; NIDCD Review of Applications on Translational Research in Voice, Speech, and Language.

Date: January 21, 2016.

Time: 11:30 a.m. to 2:00 p.m.

Agenda: To review and evaluate grant applications.

Place: National Institutes of Health, Neuroscience Center, 6001 Executive Boulevard, Rockville, MD 20852 (Telephone Conference Call).

Contact Person: Shiguang Yang, DVM, Ph.D., Scientific Review Officer, Division of Extramural Activities, NIDCD, NIH, 6001 Executive Blvd., Room 8349, Bethesda, MD 20892, 301–496–8683, *yangshi@nidcd.nih.gov.*

(Catalogue of Federal Domestic Assistance Program Nos. 93.173, Biological Research Related to Deafness and Communicative Disorders, National Institutes of Health, HHS)

Dated: December 10, 2015.

Sylvia Neal,

Program Analyst, Office of Federal Advisory Committee Policy.

[FR Doc. 2015–31552 Filed 12–15–15; 8:45 am]

BILLING CODE 4140–01–P

DEPARTMENT OF HEALTH AND HUMAN SERVICES

National Institutes of Health

National Institute of Allergy and Infectious Diseases; Notice of Closed Meetings

Pursuant to section 10(d) of the Federal Advisory Committee Act, as amended (5 U.S.C. App.), notice is hereby given of the following meetings.

The meetings will be closed to the public in accordance with the provisions set forth in sections 552b(c)(4) and 552b(c)(6), Title 5 U.S.C., as amended. The contract proposals and the discussions could disclose confidential trade secrets or commercial property such as patentable material, and personal information concerning individuals associated with the contract proposals, the disclosure of which would constitute a clearly unwarranted invasion of personal privacy.

Name of Committee: National Institute of Allergy and Infectious Diseases Special Emphasis Panel; Development of Therapeutic Products for Biodefense and Emerging Infectious Diseases.

Date: January 11, 2016.

Time: 8:00 a.m. to 4:00 p.m.

Agenda: To review and evaluate contract proposals.

Place: Bethesda North Marriott Hotel & Conference Center, Montgomery County Conference Center Facility, 5701 Marinelli Road, North Bethesda, MD 20852.

Contact Person: Travis J. Taylor, Ph.D., Scientific Review Officer, Scientific Review Program, Division of Extramural Activities, Room 3G62B, 5601 Fishers Lane, MSC 9823, Bethesda, MD 20892–9823, (240) 669–5082, *Travis.Taylor@nih.gov.*

Name of Committee: National Institute of Allergy and Infectious Diseases Special Emphasis Panel; Development of Therapeutic Products for Biodefense and Emerging Infectious Diseases.

Date: January 12, 2016.

Time: 8:00 a.m. to 4:00 p.m.

Agenda: To review and evaluate contract proposals.

Place: Bethesda North Marriott Hotel & Conference Center, Montgomery County Conference Center Facility, 5701 Marinelli Road, North Bethesda, MD 20852.

Contact Person: Travis J. Taylor, Ph.D., Scientific Review Officer, Scientific Review Program, Division of Extramural Activities, Room 3G62B, 5601 Fishers Lane, MSC 9823,

Bethesda, MD 20892–9823, (240) 669–5082, *Travis.Taylor@nih.gov.*

(Catalogue of Federal Domestic Assistance Program Nos. 93.855, Allergy, Immunology, and Transplantation Research; 93.856, Microbiology and Infectious Diseases Research, National Institutes of Health, HHS)

Dated: December 10, 2015.

Natasha M. Copeland,

Program Analyst, Office of Federal Advisory Committee Policy.

[FR Doc. 2015–31550 Filed 12–15–15; 8:45 am]

BILLING CODE 4140–01–P

DEPARTMENT OF HEALTH AND HUMAN SERVICES

National Institutes of Health

National Institute on Aging; Notice of Closed Meeting

Pursuant to section 10(d) of the Federal Advisory Committee Act, as amended (5 U.S.C. App.), notice is hereby given of the following meeting.

The meeting will be closed to the public in accordance with the provisions set forth in sections 552b(c)(4) and 552b(c)(6), Title 5 U.S.C., as amended. The grant applications and the discussions could disclose confidential trade secrets or commercial property such as patentable material, and personal information concerning individuals associated with the grant applications, the disclosure of which would constitute a clearly unwarranted invasion of personal privacy.

Name of Committee: National Institute on Aging Special Emphasis Panel; Neuromuscular Interactions.

Date: January 13, 2016.

Time: 12:00 p.m. to 4:00 p.m.

Agenda: To review and evaluate grant applications.

Place: National Institute on Aging, Gateway Building, Suite 2C212, 7201 Wisconsin Avenue, Bethesda, MD 20892, (Telephone Conference Call).

Contact Person: Alicja L. Markowska, Ph.D., DSC, Scientific Review Branch, National Institute on Aging, 7201 Wisconsin Avenue, Suite 2C212, Bethesda, MD 20892, 301–496–9666, *markowsa@nia.nih.gov.*

(Catalogue of Federal Domestic Assistance Program Nos. 93.866, Aging Research, National Institutes of Health, HHS)

Dated: December 10, 2015.

Melanie J. Gray,

Program Analyst, Office of Federal Advisory Committee Policy.

[FR Doc. 2015–31555 Filed 12–15–15; 8:45 am]

BILLING CODE 4140–01–P

DEPARTMENT OF HEALTH AND HUMAN SERVICES

National Institutes of Health

National Institute on Aging; Notice of Closed Meetings

Pursuant to section 10(d) of the Federal Advisory Committee Act, as amended (5 U.S.C. App.), notice is hereby given of the following meetings.

The meetings will be closed to the public in accordance with the provisions set forth in sections 552b(c)(4) and 552b(c)(6), Title 5 U.S.C., as amended. The grant applications and the discussions could disclose confidential trade secrets or commercial property such as patentable material, and personal information concerning individuals associated with the grant applications, the disclosure of which would constitute a clearly unwarranted invasion of personal privacy.

Name of Committee: National Institute on Aging Special Emphasis Panel; Short-term Measurements of Improved Physical and Molecular Resilience in Preclinical Models (R01).

Date: January 29, 2016.

Time: 12:00 p.m. to 2:30 p.m.

Agenda: To review and evaluate grant applications.

Place: National Institute on Aging, Gateway Building, Suite 2C212, 7201 Wisconsin Avenue, Bethesda, MD 20892, (Telephone Conference Call).

Contact Person: Bita Nakhai, Ph.D., Scientific Review Branch, National Institute on Aging, Gateway Bldg., 2C212, 7201 Wisconsin Avenue, Bethesda, MD 20814, 301–402–7701, *nakhaib@nia.nih.gov.*

Name of Committee: National Institute on Aging Special Emphasis Panel; Alzheimer's Disease Drug Development.

Date: February 3, 2016.

Time: 12:30 p.m. to 4:00 p.m.

Agenda: To review and evaluate grant applications.

Place: National Institute on Aging, Gateway Building, Suite 2C212, 7201 Wisconsin Avenue, Bethesda, MD 20892, (Telephone Conference Call).

Contact Person: Alexander Parsadanian, Ph.D., Scientific Review Officer, National Institute on Aging, Gateway Building 2C/212, 7201 Wisconsin Avenue, Bethesda, MD 20892, 301–496–9666, *Parsadaniana@nia.nih.gov.*

Name of Committee: National Institute on Aging Special Emphasis Panel; FGF21 and Aging.

Date: February 23, 2016.

Time: 12:00 p.m. to 3:30 p.m.

Agenda: To review and evaluate grant applications.

Place: National Institute on Aging, Gateway Building, Suite 2C212, 7201 Wisconsin Avenue, Bethesda, MD 20892, (Telephone Conference Call).

Contact Person: Alexander Parsadanian, Ph.D., Scientific Review Officer, National Institute on Aging Gateway, Building 2C/212, 7201 Wisconsin Avenue, Bethesda, MD 20892, 301–496–9666, *parsadaniana@nia.nih.gov.*

(Catalogue of Federal Domestic Assistance Program Nos. 93.866, Aging Research, National Institutes of Health, HHS)

Dated: December 10, 2015.

Melanie J. Gray,

Program Analyst, Office of Federal Advisory Committee Policy.

[FR Doc. 2015–31556 Filed 12–15–15; 8:45 am]

BILLING CODE 4140–01–P

DEPARTMENT OF HEALTH AND HUMAN SERVICES

National Institutes of Health

National Institute on Deafness and Other Communication Disorders; Notice of Closed Meetings

Pursuant to section 10(d) of the Federal Advisory Committee Act, as amended (5 U.S.C. App.), notice is hereby given of the following meetings.

The meetings will be closed to the public in accordance with the provisions set forth in sections 552b(c)(4) and 552b(c)(6), Title 5 U.S.C., as amended. The grant applications and the discussions could disclose confidential trade secrets or commercial property such as patentable material, and personal information concerning individuals associated with the grant applications, the disclosure of which would constitute a clearly unwarranted invasion of personal privacy.

Name of Committee: National Institute on Deafness and Other Communication Disorders Special Emphasis Panel; Clinical Trial Review.

Date: January 27, 2016.

Time: 3:00 p.m. to 4:00 p.m.

Agenda: To review and evaluate grant applications.

Place: National Institutes of Health, Neuroscience Center, 6001 Executive Boulevard, Rockville, MD 20852, (Telephone Conference Call).

Contact Person: Shiguang Yang, DVM, Ph.D., Scientific Review Officer, Division of Extramural Activities, NIDCD, NIH, 6001 Executive Blvd., Room 8349, Bethesda, MD 20892, 301–496–8683, *yangshi@nidcd.nih.gov.*

Name of Committee: National Institute on Deafness and Other Communication Disorders Special Emphasis Panel; Translational Grant Review.

Date: January 27, 2016.

Time: 12:00 p.m. to 4:00 p.m.

Agenda: To review and evaluate grant applications.

Place: National Institutes of Health, Neuroscience Center, 6001 Executive Boulevard, Rockville, MD 20852, (Telephone Conference Call).

Contact Person: Sheo Singh, Ph.D., Scientific Review Officer, Scientific Review Branch, Division of Extramural Activities, 6001 Executive Blvd., Room 8351, Bethesda, MD 20892, 301–496–8683, *singhs@nidcd.nih.gov.*

Name of Committee: Communication Disorders Review Committee.

Date: February 18–19, 2016.

Time: 8:00 a.m. to 5:00 p.m.

Agenda: To review and evaluate grant applications.

Place: The Declan Suites San Diego, 701 A Street, San Diego, CA 92101.

Contact Person: Eliane Lazar-Wesley, Scientific Review Officer, Division of Extramural Activities, National Institute on Deafness and other Communication Disorders/NIH, 6001 Executive Blvd., MSC 9670, Bethesda, MD 20892–8401, 301–496–8683, *el6r@nih.gov.*

Name of Committee: National Institute on Deafness and Other Communication Disorders Special Emphasis Panel; Hearing and Balance Fellowships.

Date: February 19, 2016.

Time: 1:00 p.m. to 6:00 p.m.

Agenda: To review and evaluate grant applications.

Place: The Declan Suites San Diego, 701 A Street, San Diego, CA 92101.

Contact Person: Kausik Ray, Ph.D., Scientific Review Officer, National Institute on Deafness and Other Communication Disorders, National Institutes of Health Rockville, MD 20850, 301–402–3587, *rayk@nidcd.nih.gov.*

(Catalogue of Federal Domestic Assistance Program Nos. 93.173, Biological Research Related to Deafness and Communicative Disorders, National Institutes of Health, HHS)

Dated: December 10, 2015.

Sylvia Neal,

Program Analyst, Office of Federal Advisory Committee Policy.

[FR Doc. 2015–31553 Filed 12–15–15; 8:45 am]

BILLING CODE 4140–01–P

DEPARTMENT OF HEALTH AND HUMAN SERVICES

National Institutes of Health

National Human Genome Research Institute; Notice of Closed Meeting

Pursuant to section 10(d) of the Federal Advisory Committee Act, as amended (5 U.S.C. App.), notice is hereby given of the following meeting.

The meeting will be closed to the public in accordance with the provisions set forth in sections 552b(c)(4) and 552b(c)(6), Title 5 U.S.C., as amended. The grant applications and the discussions could disclose confidential trade secrets or commercial property such as patentable material, and personal information concerning individuals associated with the grant applications, the disclosure of which would constitute a clearly unwarranted invasion of personal privacy.

Name of Committee: Center for Inherited Disease Research Access Committee.

Date: January 8, 2016.

Time: 11:30 a.m. to 1:00 p.m.

Agenda: To review and evaluate grant applications.

Place: National Institutes of Health, 5635 Fishers Lane, Bethesda, MD 20892, (Telephone Conference Call).

Contact Person: Camilla E. Day, Ph.D., Scientific Review Officer, CIDR, National Human Genome Research Institute, National Institutes of Health, 5635 Fishers Lane, Suite 4075, Bethesda, MD 20892, 301–402–8837, *camilla.day@nih.gov.*

(Catalogue of Federal Domestic Assistance Program Nos. 93.172, Human Genome Research, National Institutes of Health, HHS)

Dated: December 10, 2015.

Sylvia Neal,

Program Analyst, Office of Federal Advisory Committee Policy.

[FR Doc. 2015–31554 Filed 12–15–15; 8:45 am]

BILLING CODE 4140–01–P

DEPARTMENT OF HEALTH AND HUMAN SERVICES

National Institutes of Health

Proposed Collection; 60-Day Comment Request; CareerTrac

SUMMARY: In compliance with the requirement of Section 3506(c)(2)(A) of the Paperwork Reduction Act of 1995, for opportunity for public comment on proposed data collection projects, the Fogarty International Center (FIC), National Institute of Environmental Health Sciences (NIEHS), including the Intramural Research and Training Award (IRTA) and Superfund Research Program (SRP) within NIEHS, National Institute of General Medical Science (NIGMS), and National Cancer Institute (NCI), the National Institutes of Health (NIH) will publish periodic summaries of proposed projects to be submitted to the Office of Management and Budget (OMB) for review and approval.

Written comments and/or suggestions from the public and affected agencies are invited to address one or more of the following points: (1) Whether the proposed collection of information is necessary for the proper performance of the function of the agency, including whether the information will have practical utility; (2) The accuracy of the agency's estimate of the burden of the proposed collection of information, including the validity of the methodology and assumptions used; (3) The quality, utility, and clarity of the information to be collected; and (4) Minimize the burden of the collection of information on those who are to respond, including the use of appropriate automated, electronic, mechanical, or other technological collection techniques or other forms of information technology.

To Submit Comments and For Further Information: To obtain a copy of the data collection plans and instruments, submit comments in writing, or request more information on the proposed project, contact: Dr. Rachel Sturke, Evaluation Officer, Division of Science Policy, Planning, and Evaluation, FIC, NIH, 16 Center Drive, Bethesda, MD 20892 or call non-toll-free number (301)-480-6025 or Email your request, including your address to: *rachel.sturke@nih.gov.* Formal requests for additional plans and instruments must be requested in writing.

Comment Due Date: Comments regarding this information collection are best assured of having their full effect if received within 60 days of the date of this publication.

Proposed Collection: CareerTrac, 0925–0568, Expiration *Date:* 02/29/2016—REVISION, Fogarty International Center (FIC), National Institute of Environmental Health Sciences (NIEHS), National Institute of General Medical Science (NIGMS), National Cancer Institute (NCI), National Institutes of Health (NIH).

Need and Use of Information Collection: This data collection system is being developed to track, evaluate and report short and long-term outputs, outcomes and impacts of trainees involved in health research training programs—specifically tracking this for at least ten years following training by having Principal Investigators enter data after trainees have completed the program. The data collection system provides a streamlined, web-based application permitting principal investigators to record career achievement progress by trainee on a voluntary basis. FIC, NLM, NIEHS, NCI and NIGMS management will use this data to monitor, evaluate and adjust grants to ensure desired outcomes are achieved, comply with OMB Part requirements, respond to congressional inquiries, and as a guide to inform future strategic and management decisions regarding the grant program.

OMB approval is requested for 3 years. There are no costs to respondents other than their time. The total estimated annualized burden hours are 8,714.

ESTIMATED ANNUALIZED BURDEN HOURS

Type of respondent	Number of respondents	Number of responses per respondent	Average time per response (in hours)	Total annual burden hour
FIC Grantee	200	43	30/60	4300
NIEHS Grantee	140	17	30/60	1190
NCI/CRCHD Grantee	240	22	30/60	2640
NIGMS Grantee	54	11	30/60	297
Superfund Grantee	35	10	30/60	175
NLM Grantee	14	16	30/60	112

Dated: December 1, 2015.

Dexter Collins,

Executive Officer, FIC, NIH.

[FR Doc. 2015–31632 Filed 12–15–15; 8:45 am]

BILLING CODE 4140–01–P

DEPARTMENT OF HEALTH AND HUMAN SERVICES

National Institutes of Health

National Institute of Diabetes and Digestive and Kidney Diseases; Notice of Meetings

Pursuant to section 10(d) of the Federal Advisory Committee Act, as amended (5 U.S.C. App.), notice is hereby given of meetings of the National Diabetes and Digestive and Kidney Diseases Advisory Council.

The meetings will be open to the public as indicated below, with attendance limited to space available. Individuals who plan to attend and need special assistance, such as sign language interpretation or other reasonable accommodations, should notify the Contact Person listed below in advance of the meeting.

The meetings will be closed to the public in accordance with the provisions set forth in sections 552b(c)(4) and 552b(c)(6), Title 5 U.S.C., as amended. The grant applications and the discussions could disclose confidential trade secrets or commercial property such as patentable material, and personal information concerning individuals associated with the grant applications, the disclosure of which would constitute a clearly unwarranted invasion of personal privacy.

Name of Committee: National Diabetes and Digestive and Kidney Diseases Advisory Council.

Date: January 27, 2016.

Open: 8:30 a.m. to 12:00 p.m.

Agenda: To present the Director's Report and other scientific presentations.

Place: National Institutes of Health, Building 31, Conference Room 10, 31 Center Drive, Bethesda, MD 20892.

Closed: 4:15 p.m. to 4:30 p.m.

Agenda: To review and evaluate grant applications.

Place: National Institutes of Health, Building 31, Conference Room 10, 31 Center Drive, Bethesda, MD 20892.

Contact Person: Brent B. Stanfield, Ph.D., Director, Division of Extramural Activities, National Institutes of Diabetes and Digestive and Kidney Diseases, 6707 Democracy Blvd. Room 715, Msc 5452, Bethesda, MD 20892, (301) 594–8843, *stanfibr@niddk.nih.gov.*

Name of Committee: National Diabetes and Digestive and Kidney Diseases Advisory Council, Digestive Diseases and Nutrition Subcommittee.

Date: January 27, 2016.

Open: 1:00 p.m. to 2:30 p.m.

Agenda: To review the Division's scientific and planning activities.

Place: Nations Institutes of Health, Building 31, 31 Center Drive, Conference Room 6, Bethesda, MD 20892.

Closed: 2:30 p.m. to 4:00 p.m.

Agenda: To review and evaluate grant applications.

Place: National Institutes of Health, Building 31, 31 Center Drive, Conference Room 6, Bethesda, MD 20892.

Contact Person: Brent B. Stanfield, Ph.D., Director, Division of Extramural Activities, National Institutes of Diabetes and Digestive and Kidney Diseases, 6707 Democracy Blvd. Room 715, MSC 5452, Bethesda, MD 20892, (301) 594–8843, *stanfibr@niddk.nih.gov.*

Name of Committee: National Diabetes and Digestive and Kidney Diseases Advisory Council; Diabetes, Endocrinology, and Metabolic Diseases.

Date: January 27, 2016.

Closed: 1:00 p.m. to 2:00 p.m.

Agenda: To review and evaluate grant applications.

Place: National Institutes of Health, Building 31, 31 Center Drive, Conference Room 10, Bethesda, MD 20892.

Open: 2:00 p.m. to 4:00 p.m.

Agenda: To review the Division's scientific and planning activities.

Place: National Institutes of Health, Building 31, 31 Center Drive, Conference Room 10, Bethesda, MD 20892.

Contact Person: Brent B. Stanfield, Ph.D., Director, Division of Extramural Activities, National Institutes of Diabetes and Digestive and Kidney Diseases, 6707 Democracy Blvd. Room 715, MSC 5452, Bethesda, MD 20892, (301) 594–8843, *stanfibr@niddk.nih.gov.*

Name of Committee: National Diabetes and Digestive and Kidney Diseases Advisory Council, Kidney, Urologic and Hematologic Diseases Subcommittee.

Date: January 27, 2016.

Open: 1:00 p.m. to 3:00 p.m.

Agenda: To review the Division's scientific and planning activities.

Place: National Institutes of Health, Building 31, Conference Room 7, 31 Center Drive, Bethesda, MD 20892.

Closed: 3:00 p.m. to 4:00 p.m.

Agenda: To review and evaluate grant applications.

Place: National Institutes of Health, Building 31, Conference Room 7, 31 Center Drive, Bethesda, MD 20892.

Contact Person: Brent B. Stanfield, Ph.D., Director, Division of Extramural Activities, National Institutes of Diabetes and Digestive and Kidney Diseases, 6707 Democracy Blvd., Room 715, MSC 5452, Bethesda, MD 20892, (301) 594–8843, *stanfibr@niddk.nih.gov.*

Any interested person may file written comments with the committee by forwarding the statement to the Contact Person listed on this notice. The statement should include the name, address, telephone number and when applicable, the business or professional affiliation of the interested person.

In the interest of security, NIH has instituted stringent procedures for entrance onto the NIH campus. All visitor vehicles, including taxicabs, hotel, and airport shuttles will be inspected before being allowed on campus. Visitors will be asked to show one form of identification (for example, a government-issued photo ID, driver's license, or passport) and to state the purpose of their visit.

Information is also available on the Institute's/Center's home page: *www.niddk.nih.gov/fund/divisions/DEA/Council/coundesc.htm.,* where an agenda and any additional information for the meeting will be posted when available.

(Catalogue of Federal Domestic Assistance Program Nos. 93.847, Diabetes, Endocrinology and Metabolic Research; 93.848, Digestive Diseases and Nutrition Research; 93.849, Kidney Diseases, Urology and Hematology Research, National Institutes of Health, HHS)

Dated: December 10, 2015.

David Clary,

Program Analyst, Office of Federal Advisory Committee Policy.

[FR Doc. 2015–31546 Filed 12–15–15; 8:45 am]

BILLING CODE 4140–01–P

DEPARTMENT OF HEALTH AND HUMAN SERVICES

National Institutes of Health

National Institute of Allergy and Infectious Diseases; Notice of Meetings

Pursuant to section 10(d) of the Federal Advisory Committee Act, as amended (5 U.S.C. App.), notice is hereby given of meetings of the National Advisory Allergy and Infectious Diseases Council.

The meetings will be open to the public as indicated below, with attendance limited to space available. Individuals who plan to attend and need special assistance, such as sign language interpretation or other reasonable accommodations, should notify the Contact Person listed below in advance of the meeting.

The meetings will be closed to the public in accordance with the provisions set forth in sections 552b(c)(4) and 552b(c)(6), Title 5 U.S.C., as amended. The grant applications and the discussions could disclose confidential trade secrets or commercial property such as patentable material, and personal information concerning individuals associated with the grant applications, the disclosure of which would constitute a clearly unwarranted invasion of personal privacy.

Name of Committee: National Advisory Allergy and Infectious Diseases Council; Microbiology and Infectious Diseases Subcommittee.

Date: January 25, 2016.

Closed: 8:30 a.m. to 10:15 a.m.

Agenda: To review and evaluate grant applications.

Place: National Institutes of Health Natcher Building Conference Rooms F1/F2 45 Center Drive, Bethesda, MD 20892.

Open: 1:00 p.m. to adjournment.

Agenda: Reports from the Division Director and other staff.

Place: National Institutes of Health, Natcher Building, Conference Rooms F1/F2, 45 Center Drive, Bethesda, MD 20892.

Contact Person: Matthew J. Fenton, Ph.D., Director, Division of Extramural Activities, National Institute of Allergy and Infectious Diseases, 5601 Fishers Lane, Rm 4F50, Bethesda, MD 20892, 301–496–7291, *fentonm@niaid.nih.gov.*

Name of Committee: National Advisory Allergy and Infectious Diseases Council; Allergy, Immunology and Transplantation Subcommittee.

Date: January 25, 2016.

Closed: 8:30 a.m. to 10:15 a.m.

Agenda: To review and evaluate grant applications.

Place: National Institutes of Health, Natcher Building, Conference Room D, 45 Center Drive, Bethesda, MD 20892.

Open: 1:00 p.m. to adjournment.

Agenda: Reports from the Division Director and other staff.

Place: National Institutes of Health, Natcher Building, Conference Room D, 45 Center Drive, Bethesda, MD 20892.

Contact Person: Matthew J. Fenton, Ph.D., Director, Division of Extramural Activities, National Institute of Allergy and Infectious Diseases, 5601 Fishers Lane, Rm 4F50, Bethesda, MD 20892, 301–496–7291, *fentonm@niaid.nih.gov.*

Name of Committee: National Advisory Allergy and Infectious Diseases Council.

Date: January 25, 2016.

Open: 10:30 a.m. to 11:40 a.m.

Agenda: Report from the Institute Director.

Place: National Institutes of Health, Natcher Building, Conference Rooms E1/E2, 45 Center Drive, Bethesda, MD 20892.

Closed: 11:40 a.m. to 12:00 p.m.

Agenda: To review and evaluate grant applications.

Place: National Institutes of Health, Natcher Building, Conference Rooms E1/E2, 45 Center Drive, Bethesda, MD 20892.

Contact Person: Matthew J. Fenton, Ph.D., Director, Division of Extramural Activities, National Institute of Allergy and Infectious Diseases, 5601 Fishers Lane, Rm 4F50, Bethesda, MD 20892, 301–496–7291, *fentonm@niaid.nih.gov.*

Name of Committee: National Advisory Allergy and Infectious Diseases Council; Acquired Immunodeficiency Syndrome Subcommittee.

Date: January 25, 2016.

Closed: 8:30 a.m. to 10:15 a.m.

Agenda: To review and evaluate grant applications.

Place: National Institutes of Health, Natcher Building, Conference Room A, 45 Center Drive, Bethesda, MD 20892.

Open: 1:00 p.m. to adjournment.

Agenda: Program advisory discussions and reports from division staff.

Place: National Institutes of Health, Natcher Building, Conference Rooms E1/E2, 45 Center Drive, Bethesda, MD 20892.

Contact Person: Matthew J. Fenton, Ph.D., Director, Division of Extramural Activities, National Institute of Allergy and Infectious Diseases, 5601 Fishers Lane, Rm 4F50, Bethesda, MD 20892, 301–496–7291, *fentonm@niaid.nih.gov.*

Name of Committee: National Advisory Allergy and Infectious Diseases Council; Acquired Immunodeficiency Syndrome Subcommittee.

Date: June 6, 2016.

Closed: 8:30 a.m. to 10:15 a.m.

Agenda: To review and evaluate grant applications.

Place: National Institutes of Health, Natcher Building, Conference Room A, 45 Center Drive, Bethesda, MD 20892.

Open: 1:00 p.m. to adjournment.

Agenda: Program advisory discussions and reports from division staff.

Place: National Institutes of Health, Natcher Building, Conference Rooms E1/E2, 45 Center Drive, Bethesda, MD 20892.

Contact Person: Matthew J. Fenton, Ph.D., Director, Division of Extramural Activities, National Institute of Allergy and Infectious Diseases, 5601 Fishers Lane, Rm 4F50, Bethesda, MD 20892, 301–496–7291, *fentonm@niaid.nih.gov.*

Name of Committee: National Advisory Allergy and Infectious Diseases Council.

Date: June 6, 2016.

Open: 10:30 a.m. to 11:40 a.m.

Agenda: Report from the Institute Director.

Place: National Institutes of Health, Natcher Building, Conference Rooms E1/E2, 45 Center Drive, Bethesda, MD 20892.

Closed: 11:40 a.m. to 12:00 p.m.

Agenda: To review and evaluate grant applications.

Place: National Institutes of Health, Natcher Building, Conference Rooms E1/E2, 45 Center Drive, Bethesda, MD 20892.

Contact Person: Matthew J. Fenton, Ph.D., Director, Division of Extramural Activities, National Institute of Allergy and Infectious Diseases, 5601 Fishers Lane, Rm 4F50, Bethesda, MD 20892, 301–496–7291, *fentonm@niaid.nih.gov.*

Name of Committee: National Advisory Allergy and Infectious Diseases Council; Allergy, Immunology and Transplantation Subcommittee.

Date: June 6, 2016.

Closed: 8:30 a.m. to 10:15 a.m.

Agenda: To review and evaluate grant applications.

Place: National Institutes of Health, Natcher Building, Conference Room D, 45 Center Drive, Bethesda, MD 20892.

Open: 1:00 p.m. to adjournment.

Agenda: Reports from the Division Director and other staff.

Place: National Institutes of Health, Natcher Building, Conference Room D, 45 Center Drive, Bethesda, MD 20892.

Contact Person: Matthew J. Fenton, Ph.D., Director, Division of Extramural Activities, National Institute of Allergy and Infectious Diseases, 5601 Fishers Lane, Rm 4F50, Bethesda, MD 20892, 301–496–7291, *fentonm@niaid.nih.gov.*

Name of Committee: National Advisory Allergy and Infectious Diseases Council; Microbiology and Infectious Diseases Subcommittee.

Date: June 6, 2016.

Closed: 8:30 a.m. to 10:15 a.m.

Agenda: To review and evaluate grant applications.

Place: National Institutes of Health, Natcher Building, Conference Rooms F1/F2, 45 Center Drive, Bethesda, MD 20892.

Open: 1:00 p.m. to adjournment.

Agenda: Reports from the Division Director and other staff.

Place: National Institutes of Health, Natcher Building, Conference Rooms F1/F2, 45 Center Drive, Bethesda, MD 20892.

Contact Person: Matthew J. Fenton, Ph.D., Director, Division of Extramural Activities, National Institute of Allergy and Infectious Diseases, 5601 Fishers Lane, Rm 4F50, Bethesda, MD 20892, 301–496–7291, *fentonm@niaid.nih.gov.*

Name of Committee: National Advisory Allergy and Infectious Diseases Council; Microbiology and Infectious Diseases Subcommittee.

Date: September 12, 2016.

Closed: 8:30 a.m. to 10:15 a.m.

Agenda: To review and evaluate grant applications.

Place: National Institutes of Health, Natcher Building, Conference Rooms F1/F2, 45 Center Drive, Bethesda, MD 20892.

Open: 1:00 p.m. to adjournment.

Agenda: Reports from the Division Director and other staff.

Place: National Institutes of Health, Natcher Building, Conference Rooms F1/F2, 45 Center Drive, Bethesda, MD 20892.

Contact Person: Matthew J. Fenton, Ph.D., Director, Division of Extramural Activities, National Institute of Allergy and Infectious Diseases, 5601 Fishers Lane, Rm 4F50, Bethesda, MD 20892, 301–496–7291, *fentonm@niaid.nih.gov.*

Name of Committee: National Advisory Allergy and Infectious Diseases Council; Allergy, Immunology and Transplantation Subcommittee.

Date: September 12, 2016.

Closed: 8:30 a.m. to 10:15 a.m.

Agenda: To review and evaluate grant applications.

Place: National Institutes of Health, Natcher Building, Conference Room D, 45 Center Drive, Bethesda, MD 20892.

Open: 1:00 p.m. to adjournment.

Agenda: Reports from the Division Director and other staff.

Place: National Institutes of Health, Natcher Building, Conference Room D, 45 Center Drive, Bethesda, MD 20892.

Contact Person: Matthew J. Fenton, Ph.D., Director, Division of Extramural Activities, National Institute of Allergy and Infectious Diseases, 5601 Fishers Lane, Rm 4F50, Bethesda, MD 20892, 301–496–7291, *fentonm@niaid.nih.gov.*

Name of Committee: National Advisory Allergy and Infectious Diseases Council.

Date: September 12, 2016.

Open: 10:30 a.m. to 11:40 a.m.

Agenda: Report from the Institute Director.

Place: National Institutes of Health, Natcher Building, Conference Rooms E1/E2, 45 Center Drive, Bethesda, MD 20892.

Closed: 11:40 a.m. to 12:00 p.m.

Agenda: To review and evaluate grant applications.

Place: National Institutes of Health, Natcher Building, Conference Rooms E1/E2, 45 Center Drive, Bethesda, MD 20892.

Contact Person: Matthew J. Fenton, Ph.D., Director, Division of Extramural Activities, National Institute of Allergy and Infectious Diseases, 5601 Fishers Lane, Rm 4F50, Bethesda, MD 20892, 301–496–7291, *fentonm@niaid.nih.gov.*

Name of Committee: National Advisory Allergy and Infectious Diseases Council; Acquired Immunodeficiency Syndrome Subcommittee.

Date: September 12, 2016.

Closed: 8:30 a.m. to 10:15 a.m.

Agenda: To review and evaluate grant applications.

Place: National Institutes of Health, Natcher Building, Conference Room A, 45 Center Drive, Bethesda, MD 20892.

Open: 1:00 p.m. to adjournment.

Agenda: Program advisory discussions and reports from division staff.

Place: National Institutes of Health, Natcher Building, Conference Rooms E1/E2, 45 Center Drive, Bethesda, MD 20892.

Contact Person: Matthew J. Fenton, Ph.D., Director, Division of Extramural Activities, National Institute of Allergy and Infectious Diseases, 5601 Fishers Lane, Rm 4F50, Bethesda, MD 20892, 301–496–7291, *fentonm@niaid.nih.gov.*

Any interested person may file written comments with the committee by forwarding the statement to the Contact Person listed on this notice. The statement should include the name, address, telephone number and when applicable, the business or professional affiliation of the interested person.

In the interest of security, NIH has instituted stringent procedures for entrance onto the NIH campus. All visitor vehicles, including taxicabs, hotel, and airport shuttles will be inspected before being allowed on campus. Visitors will be asked to show one form of identification (for example, a government-issued photo ID, driver's license, or passport) and to state the purpose of their visit.

Information is also available on the Institute's/Center's home page: *www.niaid.nih.gov/facts/facts.htm,* where an agenda and any additional information for the meeting will be posted when available.

(Catalogue of Federal Domestic Assistance Program Nos. 93.855, Allergy, Immunology, and Transplantation Research; 93.856, Microbiology and Infectious Diseases Research, National Institutes of Health, HHS)

Dated: December 10, 2015.

Natasha M. Copeland,

Program Analyst, Office of Federal Advisory Committee Policy.

[FR Doc. 2015–31548 Filed 12–15–15; 8:45 am]

BILLING CODE 4140–01–P

DEPARTMENT OF THE INTERIOR

Fish and Wildlife Service

[FWS–R4–ES–2015–N231; FXES11120400000–167–FF04EF2000]

Endangered and Threatened Wildlife and Plants; Receipt of Application for an Incidental Take Permit; Availability of Low-Effect Habitat Conservation Plan and Associated Documents; Highlands County, FL

AGENCY: Fish and Wildlife Service, Interior.

ACTION: Notice of availability; request for comment/information.

SUMMARY: We, the Fish and Wildlife Service (Service), announce the availability of an incidental take permit (ITP) and a Habitat Conservation Plan (HCP). Palmetto Lake Placid, LLC (applicant) requests ITP TE63688B–0 under the Endangered Species Act of 1973, as amended (Act). The applicant anticipates taking about 0.87 acres of feeding, breeding, and sheltering habitat used by the sand skink (*Neoseps reynoldsi*) and blue-tailed mole skink (*Eumeces egregius lividus*) (skinks) incidental to land preparation and construction in Highlands County, Florida. The applicant's HCP describes proposed minimization measures and mitigation measures to address the effects of development on the covered species.

DATES: We must receive your written comments on the ITP application and HCP on or before January 15, 2016.

ADDRESSES: See the **SUPPLEMENTARY INFORMATION** section below for information on how to submit your comments on the ITP application and HCP. You may obtain a copy of the ITP application and HCP by writing the South Florida Ecological Services Office, Attn: Permit number TE63688B–0, U.S. Fish and Wildlife Service, 1339 20th Street, Vero Beach, FL 32960–3559. In addition, we will make the ITP application and HCP available for public inspection by appointment during normal business hours at the above address.

FOR FURTHER INFORMATION CONTACT: Ms. Elizabeth Landrum, South Florida Ecological Services Office (see **ADDRESSES**); telephone: 772–469–4304.

SUPPLEMENTARY INFORMATION:

Submitting Comments

If you wish to comment on the ITP application or HCP, you may submit comments by any one of the following methods:

Email: elizabeth_landrum@fws.gov. Use ''Attn: Permit number ''TE63688B–0'' as your message subject line.

Fax: Elizabeth Landrum, 772–469–4304, Attn.: Permit number ''TE63688B–0.''

U.S. mail: Elizabeth Landrum, South Florida Ecological Services Field Office, Attn: Permit number ''TE63688B–0,'' U.S. Fish and Wildlife Service, 1339 20th Street, Vero Beach, FL 32960–3559.

In-person drop-off: You may drop off comments or request information during regular business hours at the above office address.

Public Availability of Comments

Before including your address, phone number, email address, or other personal identifying information in your comments, you should be aware that your entire comment—including your personal identifying information—may be made publicly available at any time. While you can request in your comments that your personal identifying information be withheld from public review, we cannot guarantee that we will be able to do so.

Applicant's Proposed Project

We received an application from the applicant for an incidental take permit, along with a proposed habitat conservation plan. The applicant requests an ITP under section 10(a)(1)(B) of the Act (16 U.S.C. 1531 *et seq.*). If we approve the application, the applicant anticipates taking a total of approximately 0.87 acres of skink breeding, feeding, and sheltering habitat, incidental to land preparation and construction in Section 17, Township 37 South, Range 30 East, Highlands County, Florida. The applicant plans to begin construction as soon as the ITP is approved. Development of this parcel will include construction of one structure, parking areas, stormwater retention areas, and installation of associated utilities.

The applicant proposes to minimize impacts to skinks by preserving a total of 1.80 acres of skink-occupied habitat at a Service-approved conservation bank. The Service listed the skinks as threatened in 1987 (November 6, 1987; 52 FR 20715), effective December 7, 1987.

Our Preliminary Determination

The Service has made a preliminary determination that the applicant's project, including the mitigation measures, will individually and cumulatively have a minor or negligible effect on the species covered in the HCP. Therefore, issuance of the ITP is a ''low-effect'' action and qualifies as a categorical exclusion under the National Environmental Policy Act (NEPA) (40 CFR 1506.6), as provided by the Department of the Interior Manual (516 DM 2 Appendix 1 and 516 DM 6 Appendix 1). We base our preliminary determination that issuance of the ITP qualifies as a low-effect action on the following three criteria: (1) Implementation of the project would result in minor or negligible effects on federally listed, proposed, and candidate species and their habitats; (2) Implementation of the project would result in minor or negligible effects on other environmental values or resources; and (3) Impacts of the project, considered together with the impacts of other past, present, and reasonably foreseeable similarly situated projects, would not result, over time, in cumulative effects to environmental values or resources that would be considered significant. This preliminary determination may be revised based on our review of public comments that we receive in response to this notice.

Next Steps

The Service will evaluate the HCP and comments submitted thereon to determine whether the application meets the requirements of section 10(a) of the Act. The Service will also evaluate whether issuance of the section 10(a)(1)(B) ITP complies with section 7 of the Act by conducting an intra-Service section 7 consultation. The results of this consultation, in combination with the above findings, will be used in the final analysis to determine whether or not to issue the ITP. If it is determined that the requirements of the Act are met, the ITP will be issued.

Authority: We provide this notice under Section 10 of the Endangered Species Act (16 U.S.C. 1531 *et seq.*) and NEPA regulations (40 CFR 1506.6).

Dated: December 7, 2015.

Roxanna Hinzman,

Field Supervisor, South Florida Ecological Services Office.

[FR Doc. 2015–31595 Filed 12–15–15; 8:45 am]

BILLING CODE 4333–15–P

DEPARTMENT OF THE INTERIOR

Fish and Wildlife Service

[FWS–R4–ES–2015–N226; FXES11130400000EA–123–FF04EF1000]

Endangered and Threatened Wildlife and Plants; Availability of Proposed Low-Effect Habitat Conservation Plans, Brevard and Putnam Counties, FL

AGENCY: Fish and Wildlife Service, Interior.

ACTION: Notice of availability; request for comment/information.

SUMMARY: We, the Fish and Wildlife Service (Service), have received two applications for incidental take permits (ITPs) under the Endangered Species Act of 1973, as amended (Act). Jellyfish Realty, LLC requests a 5-year ITP; and Vulcan Materials Company requests a 20-year ITP. We request public comment on the permit applications and accompanying proposed habitat conservation plans (HCPs), as well as on our preliminary determination that the plans qualify as low-effect under the National Environmental Policy Act (NEPA). To make this determination, we used our environmental action statement and low-effect screening form, which are also available for review.

DATES: To ensure consideration, please send your written comments by January 15, 2016.

ADDRESSES: If you wish to review the applications and HCPs, you may request documents by email, U.S. mail, or phone (see below). These documents are also available for public inspection by appointment during normal business hours at the office below. Send your comments or requests by any one of the following methods.

Email: northflorida@fws.gov. Use ''Attn: Permit number TE82957B–0'' as your message subject line for Jellyfish Realty, LLC; and ''Attn: Permit number TE82956B–0'' for Vulcan Materials Company.

Fax: Field Supervisor, (904) 731–3191, Attn: Permit number [Insert permit number].

U.S. mail: Field Supervisor, Jacksonville Ecological Services Field Office, Attn: Permit number [Insert permit number], U.S. Fish and Wildlife Service, 7915 Baymeadows Way, Suite 200, Jacksonville, FL 32256.

In-person drop-off: You may drop off information during regular business hours at the above office address.

FOR FURTHER INFORMATION CONTACT: Erin M. Gawera, telephone: (904) 731–3121; email: *erin_gawera@fws.gov.*

SUPPLEMENTARY INFORMATION:

Background

Section 9 of the Act (16 U.S.C. 1531 *et seq.*) and our implementing Federal regulations in the Code of Federal Regulations (CFR) at 50 CFR 17 prohibit the ''take'' of fish or wildlife species listed as endangered or threatened. Take of listed fish or wildlife is defined under the Act as ''to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct'' (16 U.S.C. 1532). However, under limited circumstances, we issue permits to authorize incidental take—*i.e.,* take that is incidental to, and not the purpose of, the carrying out of an otherwise lawful activity.

Regulations governing incidental take permits for threatened and endangered species are at 50 CFR 17.32 and 17.22, respectively. The Act's take prohibitions do not apply to federally listed plants on private lands unless such take would violate State law. In addition to meeting other criteria, an incidental take permit's proposed actions must not jeopardize the existence of federally listed fish, wildlife, or plants.

Applicants' Proposals

Jellyfish Realty, LLC

Jellyfish Realty, LLC is requesting take of approximately .53 acre of occupied Florida scrub-jay foraging and sheltering habitat incidental to construction of a veterinary clinic, and they seek a 5-year permit. The .54-acre project is located on parcel number 27–37–06–25–

00104.0–0015.00 within Section 06, Township 27 South, Range 37 East, Brevard County, Florida. The project includes construction of a commercial development and the associated infrastructure, and landscaping. The applicant proposes to mitigate for the take of the Florida scrub-jay through the preservation of approximately 1.49 acres of high-quality Florida scrub-jay habitat within the Grissom Parkway Site of the Brevard Coastal Scrub Ecosystem. The applicant also will preserve and donate one currently unencumbered parcel (Brevard County tax parcel number 24–35–01–25–00001.0–0016.00) to the Brevard County Environmentally Endangered Lands (EEL) Program so that this parcel can be managed and maintained as suitable Florida scrub-jay habitat in perpetuity. The applicant will also provide the EEL Program with a $1,200/acre (totaling $ 1,788) management endowment to ensure the continued success of monitoring and maintaining these lands as suitable Florida scrub-jay habitat.

Vulcan Materials Company

Vulcan Materials Company proposes incremental mining of sand reserves throughout the 1,183.62-acre permitted mining limits of the approximately 6,815.79-acre project area over the life of the mine, and seeks a 20-year permit for take of occupied sand skink, eastern indigo snake, and gopher tortoise, foraging and sheltering habitat. The 6,815.79-acre project is located on Sections 12–13, Township 9 south, Range 23 east, Sections 7, 17–21, 28–33, Township 9 south, Range 24 east, and Sections 5–6, Township 10 south, Range 24 east, Putnam County, Florida. The extent of direct impacts in future phases is currently undetermined; however, based on the current USFWS guidelines, approximately 343.73 acres of the site appear to be suitable for the sand skink, the eastern indigo snake, and the gopher tortoise. Currently there will be take of 0.26 acre of occupied sand skink foraging and sheltering habitat on Phase IA which will be mitigated by the purchase of .52 mitigation credits within the Tiger Creek Conservation Bank. In advance of the progression of the mining operations into future phases, quantitative surveys will be conducted for the skinks, eastern indigo snakes, and gopher tortoises to determine the occupancy and extent of occupancy within suitable areas. The completion of these surveys will be subject to the Service's approved survey guidelines at the time the surveys are conducted. The applicant proposes to mitigate for impacts to occupied skink and eastern indigo snake habitat within future phases at a ratio of 2:1 by purchasing 2 mitigation bank credits at the Tiger Creek Conservation Bank per every 1 acre of impact. The applicant proposes to mitigate for impacts to occupied gopher tortoise habitat within Phase IA, as well as in future phases, by relocating gopher tortoises and any recovered eggs to a recipient site approved by the Florida Fish and Wildlife Conservation Commission.

Our Preliminary Determination

We have determined that the applicants' proposals, including the proposed mitigation and minimization measures, would have minor or negligible effects on the species covered in their HCPs. Therefore, we determined that the ITPs for each of the applicants are ''low-effect'' projects and qualify for categorical exclusion under the National Environmental Policy Act (NEPA), as provided by the Department of the Interior Manual (516 DM 2 Appendix 1 and 516 DM 6 Appendix 1). A low-effect HCP is one involving (1) Minor or negligible effects on federally listed or candidate species and their habitats, and (2) minor or negligible effects on other environmental values or resources.

Next Steps

We will evaluate the HCPs and comments we receive to determine whether the ITP applications meet the requirements of section 10(a) of the Act (16 U.S.C. 1531 *et seq.*). If we determine that the applications meet these requirements, we will issue ITP numbers TE82957B–0, and TE82956B–0. We will also evaluate whether issuance of the section 10(a)(1)(B) ITPs complies with section 7 of the Act by conducting an intra-Service section 7 consultation. We will use the results of this consultation, in combination with the above findings, in our final analysis to determine whether or not to issue the ITPs. If the requirements are met, we will issue the permits to the applicants.

Public Comments

If you wish to comment on the permit applications, HCPs, and associated documents, you may submit comments by any one of the methods in **ADDRESSES**.

Public Availability of Comments

Before including your address, phone number, email address, or other personal identifying information in your comments, you should be aware that your entire comment—including your personal identifying information—may be made publicly available at any time. While you can ask us in your comment to withhold your personal identifying information from public review, we cannot guarantee that we will be able to do so.

Authority

We provide this notice under Section 10 of the Act and NEPA regulations (40 CFR 1506.6).

Dated: December 10, 2015.

Jay B. Herrington,

Field Supervisor, Jacksonville Field Office, Southeast Region.

[FR Doc. 2015–31590 Filed 12–15–15; 8:45 am]

BILLING CODE 4333–15–P

DEPARTMENT OF THE INTERIOR

Bureau of Land Management

[LLWY922000–L13200000–EL0000]

Notice of Public Meeting; Powder River Regional Coal Team Activities

AGENCY: Bureau of Land Management, Interior.

ACTION: Notice of public meeting.

SUMMARY: The Powder River Basin Regional Coal Team will meet as indicated below to review coal management activities in the Powder River Coal Production Region (PRCPR).

DATES: The meeting begins at 9 a.m., Wednesday, January 27, 2016.

ADDRESSES: The meeting will be held at the Wyoming Oil and Gas Conservation Commission Hearing Room, 2211 King Boulevard, Casper, Wyoming.

FOR FURTHER INFORMATION CONTACT: Wendi Stephens, Coal Coordinator, BLM Wyoming State Office, Division of Minerals and Lands, 5353 Yellowstone Road, Cheyenne, Wyoming 82009, telephone 307–775–6206; or Greg Fesko, Coal Coordinator, BLM Montana State Office, Division of Resources, 5001 Southgate Drive, Billings, Montana 59101, telephone 406–896–5080. Persons who use a telecommunications device for the deaf may call the Federal Information Relay Service (FIRS) at 1–800–877–8339 to contact the above individual during normal business hours. The FIRS is available 24 hours a day, 7 days a week, to leave a message or question with the above individual. You will receive a reply during normal business hours.

SUPPLEMENTARY INFORMATION: The purpose of the meeting is to discuss progress in processing pending coal lease by applications (LBAs), to vote on processing the West Antelope III Tract LBA in the PRCPR and the Decker South Extension Tract LBA in the PRCPR, and to discuss other Federal coal-related

actions in the region. The West Antelope III LBA Tract is adjacent to the Antelope Mine located in Campbell and Converse counties, Wyoming, and lies within T 41 N, R 71 W, sections 8, 9, 10, 17, 19, 20, 29, and 30. This LBA covers approximately 3,508.31 acres and contains an estimated 441 million tons of federal coal. The Decker South Extension LBA Tract is adjacent to the West Decker Mine located in Big Horn County, Montana, and lies within T 9 S, R 39 E, sections 13, 14, 23, 24, and 25 and within T 9 S, R 40 E, sections 19, 20, and 30. This LBA covers approximately 2,389.95 acres and contains an estimated 203 million tons of federal coal. Other agenda topics include, but are not limited to: coal activity; a coal inventory presentation; an update on BLM land use planning efforts; and a discussion updating the data adequacy standards for the PRCPR. The RCT may also consider other coal-related issues that may arise prior to the meeting and generate recommendations on any of those topics.

A public comment period will take place after all other agenda items are concluded, serving as a forum for public discussion on Federal coal management issues of concern in the PRCPR. Depending on the number of persons wishing to comment and time available, the time for individual oral comments may be limited. If there are no members of the public interested in speaking, the meeting will be adjourned. The public may submit written comments to the RCT by mailing the State Director (922), BLM Wyoming State Office, 5353 Yellowstone Road, Cheyenne, WY 82009. Written comments must be received by January 13, 2016.

Dated: December 10, 2015.

Mary Jo Rugwell,

State Director (acting).

[FR Doc. 2015–31596 Filed 12–15–15; 8:45 am]

BILLING CODE 4310–22–P

DEPARTMENT OF THE INTERIOR

National Park Service

[NPS–WASO–NRNHL–19804; PPWOCRADI0, PCU00RP14.R50000]

National Register of Historic Places; Notification of Pending Nominations and Related Actions

AGENCY: National Park Service, Interior.

ACTION: Notice.

SUMMARY: The National Park Service is soliciting comments on the significance of properties nominated before November 14, 2015, for listing or related actions in the National Register of Historic Places.

DATES: Comments should be submitted by December 31, 2015.

ADDRESSES: Comments may be sent via U.S. Postal Service to the National Register of Historic Places, National Park Service, 1849 C St. NW., MS 2280, Washington, DC 20240; by all other carriers, National Register of Historic Places, National Park Service, 1201 Eye St. NW., 8th floor, Washington, DC 20005; or by fax, 202–371–6447.

SUPPLEMENTARY INFORMATION:

The properties listed in this notice are being considered for listing or related actions in the National Register of Historic Places. Nominations for their consideration were received by the National Park Service before November 14, 2015. Pursuant to section 60.13 of 36 CFR part 60, written comments are being accepted concerning the significance of the nominated properties under the National Register criteria for evaluation.

Before including your address, phone number, email address, or other personal identifying information in your comment, you should be aware that your entire comment—including your personal identifying information—may be made publicly available at any time. While you can ask us in your comment to withhold your personal identifying information from public review, we cannot guarantee that we will be able to do so.

ILLINOIS

Cook County

Davis Theater, 4616–4630 N. Lincoln Ave., Chicago, 15000930

Jackson County

Jackson County Courthouse, 1001 Walnut St., Murphysboro, 15000931

La Salle County

Hauge Lutheran Church, 3656 E. 2631st Rd., Sheridan, 15000932

Union County

Thompson Brothers Rock Art, Address Restricted, Makanda, 15000933

Winnebago County

East Rockford Historic District (Boundary Increase), Roughly bounded by Madison, Market, 2nd & State Sts., Rockford, 15000935

Turner School, 1410 Broadway, Rockford, 15000934

KANSAS

Cowley County

East Badger Creek Culvert, (Masonry Arch Bridges of Kansas TR) 182nd Rd. approx. .3 mi. E. of 131st Rd., Winfield, 15000936

Douglas County

Beal, George Malcom, House, (Lawrence, Kansas MPS) 1624 Indiana St., Lawrence, 15000937

Republic County

Woodland Place Stock Farm, (Agriculture-Related Resources of Kansas MPS) 180 Hickory Rd., Courtland, 15000938

Shawnee County

Ritchie, John and Mary, House, 1116 SE. Madison St., Topeka, 15000939

Senate and Curtis Court Apartments Historic District, 900–914 SW. Tyler St., Topeka, 15000940

MARYLAND

St. Mary's County

De La Brooke Tobacco Barn, (Tobacco Barns of Southern Maryland MPS) De La Brooke Rd., Oraville, 15000941

MASSACHUSETTS

Suffolk County

Fox, I.J., Building, 407 Washington St., Boston, 15000942

MICHIGAN

Allegan County

Saugatuck Pump House, 735 Park St., Saugatuck, 15000943

Alpena County

IOOF Centennial Building, 150 E. Chisholm St., Alpena, 15000944

Antrim County

Elk Rapids First Methodist Episcopal Church, 301 Traverse St., Elk Rapids, 15000945

Marquette County

Braastad—Gossard Building, 308 Cleveland Ave., Ishpeming, 15000946

Wayne County

Detroit News Complex, 615 & 801 W. Lafayette Blvd., Detroit, 15000947

NEW MEXICO

Otero County

Bridge A 249—Cloudcraft, New Mexico, 65 E. Little Mexican Ave., Cloudcraft, 15000948

A request for removal has been received for the following resources:

KANSAS

Cowley County

Yount, George W., Barn, 1 mi. E of US 77, approximately 2.5 mi. N of Winfield, Winfield, 97000436

Doniphan County

Highland Water Tower, (Highland, Doniphan County, Kansas MPS) Jct. N. Genesee and W. Illinois Sts., Highland, 07000249

Authority: 60.13 of 36 CFR Part 60.

Dated: November 17, 2015.

J. Paul Loether,

Chief, National Register of Historic Places/ National Historic Landmarks Program.

[FR Doc. 2015–31589 Filed 12–15–15; 8:45 am]

BILLING CODE 4312–51–P

DEPARTMENT OF THE INTERIOR

National Park Service

[NPS–NRSS–GRD–19921, PPWONRADG0, PPMRSNR1N.NG0000 (166)]

Proposed Information Collection; Mining Claims and Non-Federal Oil and Gas Rights

AGENCY: National Park Service, Interior.

ACTION: Notice; request for comments.

SUMMARY: We (National Park Service, NPS) will ask the Office of Management and Budget (OMB) to approve the information collection (IC) described below. To comply with the Paperwork Reduction Act of 1995 and as a part of our continuing efforts to reduce paperwork and respondent burden, we invite the general public and other Federal agencies to comment on this IC. This IC is scheduled to expire on March 31, 2016. We may not conduct or sponsor and a person is not required to respond to a collection unless it displays a currently valid OMB control number.

DATES: You must submit comments on or before February 16, 2016.

ADDRESSES: Please send a copy of your comments to Madonna L. Baucum, Information Collection Clearance Officer, National Park Service, 12201 Sunrise Valley Drive (Mail Stop 242, Room 2C114), Reston, VA 20192 (mail); or *madonna_baucum@nps.gov* (email). Please include ''1024–0064'' in the subject line of your comments.

FOR FURTHER INFORMATION CONTACT: To request additional information about this IC, contact Edward O. Kassman, Jr., Regulatory Specialist, Energy and Minerals Branch, Geologic Resources Division, National Park Service, at (303) 969–2146 or via email at *Edward_Kassman@nps.gov.*

SUPPLEMENTARY INFORMATION:

I. Abstract

We regulate mineral development activities inside park boundaries pursuant to rights associated with mining claims and non-Federal oil and gas rights under regulations codified at 36 CFR part 9, subpart A (''9A Regulations''), and 36 CFR part 9, subpart B (''9B Regulations''), respectively. We promulgated both sets of regulations in the late 1970's. In the case of mining claims, we promulgated the 9A Regulations pursuant to congressional authority granted under the Mining in the Parks Act of 1976, 54 U.S.C § 100731 *et seq.,* and individual park enabling statutes. For non-Federal oil and gas rights, we regulate development activities pursuant to authority under the NPS Organic Act of 1916, 16 U.S.C. 1 *et seq.,* and individual park enabling statutes. As directed by Congress, we developed the regulations to protect park resources and visitor values from the adverse impacts associated with mineral development in park boundaries. The regulations require operators to submit specific technical information describing their future development plans, including steps to mitigate the impacts of operations. We use the information to evaluate proposed operations, ensure that all necessary mitigation measures are employed to protect park resources and values, and ensure compliance with all applicable laws and regulations.

II. Data

OMB Control Number: 1024–0064.

Title: Mining Claims and Non-Federal Oil and Gas Rights, 36 CFR 9, subparts A and B.

Service Form Number(s): None.

Type of Request: Extension of a currently approved collection of information.

Description of Respondents: Businesses (one-fourth medium to large publicly owned companies and three-fourths private entities).

Respondent's Obligation: Required to obtain or retain a benefit.

Frequency of Collection: On occasion.

Estimated Annual Nonhour Burden Cost: None

Activity	Estimated number of annual responses	Estimated response time (minutes)	Estimated annual burden (hours)
36 CFR Part 9, Subpart A—Mining and Mining Claims	1	176	176
36 CFR Part 9, Subpart B—Non-Federal Oil and Gas Operations in the National Park System	20	176	3,520
Total	21		3,696

III. Comments

We invite comments concerning this information collection on:

- Whether or not the collection of information is necessary, including whether or not the information will have practical utility;
- The accuracy of our estimate of the burden for this collection of information;
- Ways to enhance the quality, utility, and clarity of the information to be collected; and
- Ways to minimize the burden of the collection of information on respondents.

Comments that you submit in response to this notice are a matter of public record. Before including your address, phone number, email address, or other personal identifying information in your comment, you should be aware that your entire comment, including your personal identifying information, may be made publicly available at any time. While you can ask us in your comment to withhold your personal identifying information from public review, we cannot guarantee that we will be able to do so.

Dated: December 9, 2015.

Madonna L. Baucum,

Information Collection Clearance Officer, National Park Service.

[FR Doc. 2015–31613 Filed 12–15–15; 8:45 am]

BILLING CODE 4310–EH–P

DEPARTMENT OF THE INTERIOR

National Park Service

[NPS–NERO–CACO–19848; PPNECACOS0, PPMPSD1Z.YM0000]

Notice of January 11, 2016, Meeting for Cape Cod National Seashore Advisory Commission

AGENCY: National Park Service, Interior.

ACTION: Meeting notice.

SUMMARY: This notice sets forth the date of the 301st Meeting of the Cape Cod National Seashore Advisory Commission.

DATES: The public meeting of the Cape Cod National Seashore Advisory Commission will be held on Monday, January 11, 2016, at 1:00 p.m. (Eastern).

ADDRESSES: The 301st meeting of the Cape Cod National Seashore Advisory Commission will take place on Monday, January 11, 2016, at 1:00 p.m., in the conference room at park headquarters, 99 Marconi Site Road, Wellfleet, Massachusetts 02667 to discuss the following:

1. Adoption of Agenda
2. Approval of Minutes of Previous Meeting (November 16, 2015)
3. Reports of Officers
4. Reports of Subcommittees

Update of Pilgrim Nuclear Plant Emergency Planning Subcommittee

5. Superintendent's Report

Shorebird Management Plan/ Environmental Assessment
NPS Policy on the Use of UAS—Drones
Nauset Spit Update
National Park Service Centennial
Improved Properties/Town Bylaws
Herring River Wetland Restoration
Highlands Center Update
Ocean Stewardship Topics—Shoreline Change
Climate Friendly Parks

6. Old Business

Live Lightly Campaign Progress Report

7. New Business
8. Date and Agenda for Next Meeting
9. Public Comment
10. Adjournment

FOR FURTHER INFORMATION CONTACT: Further information concerning the meeting may be obtained from George E. Price, Jr., Superintendent, Cape Cod National Seashore, 99 Marconi Site, Wellfleet, Massachusetts 02667, or via telephone at (508) 771–2144.

SUPPLEMENTARY INFORMATION: The Commission was reestablished pursuant to Public Law 87–126, as amended by Public Law 105–280. The purpose of the Commission is to consult with the Secretary of the Interior, or her designee, with respect to matters relating to the development of Cape Cod National Seashore, and with respect to carrying out the provisions of sections 4 and 5 of the Act establishing the Seashore.

The meeting is open to the public. It is expected that 15 persons will be able to attend the meeting in addition to Commission members. Interested persons may make oral/written presentations to the Commission during the business meeting or file written statements. Such requests should be made to the park superintendent prior to the meeting. Before including your address, telephone number, email address, or other personal identifying information in your comment, you should be aware that your entire comment—including your personal identifying information—may be made publicly available at any time. While you may ask us in your comment to withhold your personal identifying information from public review, we cannot guarantee that we will be able to do so.

Dated: December 7, 2015.

Alma Ripps,

Chief, Office of Policy.

[FR Doc. 2015–31643 Filed 12–15–15; 8:45 am]

BILLING CODE 4310–EE–P

DEPARTMENT OF LABOR

Office of Disability Employment Policy

Advisory Committee on Increasing Competitive Integrated Employment for Individuals With Disabilities; Notice of Meeting

The Advisory Committee on Increasing Competitive Integrated Employment for Individuals with Disabilities (the Committee) was mandated by section 609 of the Rehabilitation Act of 1973, as amended by section 461 of the Workforce Innovation and Opportunity Act (WIOA). The Secretary of Labor established the Committee on September 15, 2014, in accordance with the provisions of the Federal Advisory Committee Act (FACA), as amended, 5 U.S.C. App. 2. The purpose of the Committee is to study and prepare findings, conclusions and recommendations for Congress and the Secretary of Labor on (1) ways to increase employment opportunities for individuals with intellectual or developmental disabilities or other individuals with significant disabilities in competitive, integrated employment; (2) the use of the certificate program carried out under section 14(c) of the Fair Labor Standards Act (FLSA) of 1938 (29 U.S.C. 214(c)); and (3) ways to improve oversight of the use of such certificates.

The Committee is required to meet no less than eight times. The Committee submitted an Interim Report to the Secretary of Labor; the Senate Committee on Health, Education, Labor and Pensions; and the House Committee on Education and the Workforce on September 15, 2015. A Final Report must be submitted to the same entities no later than September 15, 2016. The Committee terminates one day after the submission of the Final Report.

The next meeting of the Committee will be open to the public and take place by Webinar on Wednesday, January 27, 2016 and Thursday, January 28, 2016. The meeting will take place each day from 1:00 p.m. to 5:00 p.m., Eastern Standard Time.

On January 27th and 28th, the Committee's four subcommittees will report to the whole Committee on their work since the submission of the Interim Report and their areas of focus for the Final Report. The four subcommittees are: The Transition to Careers Subcommittee, the Complexity and Needs in Delivering Competitive Integrated Employment Subcommittee, the Marketplace Dynamics Subcommittee, and the Building State and Local Capacity Subcommittee. The full Committee will then discuss the subcommittee report outs, and the appropriate areas of focus for the Final Report. The Committee will also discuss the use and oversight of 14(c) certificates with Dr. David Weil, Administrator, Wage and Hour Division.

Members of the public wishing to participate in the Webinar must register in advance of the meeting, by Friday, January 15, 2016, using the following link—*http://bit.ly/1PT4xjj.* This link will register members of the public for both days of the January meeting.

Members of the public who wish to address the Committee during the public comment period of the meeting on Wednesday, January 27, 2016 between 3:30 p.m. and 4:30 p.m., EST, should send their name, their organization's name (if applicable) and any additional materials (such as a copy of the proposed testimony) to David Berthiaume at *Berthiaume.David.A@dol.gov* or call Mr. Berthiaume at (202) 693–7887 by Friday, January 8, 2016. Please ensure that any attachments are in an accessible format or the submission will be returned. Also, note that public comments will be limited to five minutes in length. Due to time constraints, we will be able to accommodate up to 10 requests to

address the Committee. If more than 10 requests are received, we will select a representative sample to speak and the remainder will be permitted to file written statements. Individuals with disabilities who need accommodations should also contact Mr. Berthiaume at the email address or phone number above.

Organizations or members of the public wishing to submit a written statement may do so by submitting their statement on or before January 8, 2016, to *www.acicieid.org/comments.* Written statements, with nine copies, may also be submitted to Mr. Berthiaume, Advisory Committee on Increasing Competitive Integrated Employment for Individuals with Disabilities, U.S. Department of Labor, Suite S–1303, 200 Constitution Avenue NW., Washington, DC 20210.

Please ensure that any written submission is in an accessible format or the submission will be returned. Further, it is requested that statements not be included in the body of an email. Statements deemed relevant by the Committee and received on or before January 8, 2016 will be included in the record of the meeting. Do not include any personally identifiable information (such as name, address, or other contact information) or confidential business information that you do not want publicly disclosed.

Jennifer Sheehy,

Deputy Assistant Secretary, Office of Disability Employment Policy.

[FR Doc. 2015–31615 Filed 12–15–15; 8:45 am]

BILLING CODE 4510–FK–P

LIBRARY OF CONGRESS

Copyright Royalty Board

[Docket Nos. 2012–6 CRB CD 2004–2009 (Phase II) and 2012–7 CRB SD 1999–2009 (Phase II)]

Distribution of Cable and Satellite Royalty Funds

AGENCY: Copyright Royalty Board, Library of Congress.

ACTION: Notice requesting comments.

SUMMARY: The Copyright Royalty Judges are soliciting comments on a motion by Independent Producers Group for a partial distribution of royalty funds.

DATES: Comments are due on or before January 15, 2016.

ADDRESSES: Interested claimants must submit comments to only one of the following addresses. Unless responding by email or online, claimants must submit an original, five paper copies, and an electronic version on a CD.

Email: crb@loc.gov; or

Online: Use the Federal eRulemaking Portal ''Regulations.gov'' at: *http://www.regulations.gov*.

U.S. mail: Copyright Royalty Board, P.O. Box 70977, Washington, DC 20024–0977; or

Overnight service (only USPS Express Mail is acceptable): Copyright Royalty Board, P.O. Box 70977, Washington, DC 20024–0977; or

Commercial courier: Address package to: Copyright Royalty Board, Library of Congress, James Madison Memorial Building, LM–403, 101 Independence Avenue SE., Washington, DC 20559–6000. Deliver to: Congressional Courier Acceptance Site, 2nd Street NE. and D Street NE., Washington, DC; or

Hand delivery: Library of Congress, James Madison Memorial Building, LM–401, 101 Independence Avenue SE., Washington, DC 20559–6000.

FOR FURTHER INFORMATION CONTACT: Lakeshia Keys, Program Specialist, by telephone at (202) 707–7658 or email at *crb@loc.gov*.

SUPPLEMENTARY INFORMATION: On September 18, 2015, Worldwide Subsidy Group LLC dba Independent Producers Group (''IPG'') filed with the Copyright Royalty Board Judges (''Judges'') a Motion for Partial Distribution of 2004–2009 Cable Royalties and 2000–2009 Satellite Royalties (''IPG Motion'') pursuant to Section 801(b)(3)(C) of the Copyright Act. *Motion for Partial Distribution of 2004–2009 Cable Royalties and 2000–2009 Satellite Royalties,* Docket Nos. 2012–6 CRB CD 2004–2009 (Phase II) and 2012–7 CRB SD 1999–2009 (Phase II) (consolidated); *see* 17 U.S.C. 801(b)(3)(C).

IPG seeks a 0.20% share of royalties from the Phase I Program Suppliers Category for the years 2004–2009 for cable and 2000–2009 for satellite.[1] The Motion Picture Association of America, Inc. (''MPAA'') opposes, in part, IPG's requested partial distribution. *MPAA Opposition, in Part, to Independent Producer Group's Motion for Partial Distribution of 2004–2009 Cable Royalties and 2000–2009 Satellite Royalties* (Sept. 25, 2015) (''MPAA Opposition'').

MPAA does not object to IPG's request with respect to cable royalties, subject to IPG signing a pay-back agreement as contemplated by Section 801(b)(3)(C) of the Copyright Act.[2] MPAA does, however, oppose IPG's request regarding satellite royalties because, according to MPAA (1) IPG has not yet established its entitlement to receive a share of satellite royalties, and (2) the 0.20% percentage share of the Program Suppliers Category royalties that IPG seeks is either equivalent to or greater than the total royalty award that MPAA proposed for IPG for some of the 2000–2009 satellite funds. *MPAA Opposition* at 1–2. MPAA also states that it has concerns, which it contends the Judges share, ''not only about IPG's ability, but also its willingness, to disgorge funds, should the need arise.'' *Id.* at 4, *quoting Order Denying IPG Motion For Partial Distribution,* Docket Nos. 2008–2 CRB CD 2000–03 (Phase II), 2008–1 CRB CD 1998–99 (Phase II), 2012–6 CRB CD 2004–09 (Phase II) and 2012–7 CRB SD 1999–2009 (Phase II) at 6 (Feb. 11, 2014).

IPG counters that the ''touchstone as to whether a party may seek and be advance distributed [sic] royalties has been determined to be whether such party has established itself as a 'legitimate' claimant, and whether adverse parties can set forth a 'reasonable' objection to such advance distribution.'' *IPG Reply* at 5. IPG contends that for each year from 2000–2009 it maintains cable and satellite claims that survived all claims-hearing challenges and to which even MPAA has assigned a value. IPG contends that those facts establish IPG as a ''legitimate'' claimant entitled to a partial distribution of satellite royalties. *Id.*

IPG also disputes MPAA's contention that the partial distribution percentage that IPG seeks is equivalent to or greater than the total royalty award that MPAA proposed for IPG for some of the 2000–

[1] MPAA and IPG settled all remaining Phase II controversies regarding 1999 satellite royalties in the Program Suppliers Category, and the Judges ordered a final distribution of those royalties. Order Directing Final Distribution of 1999 Satellite Royalty Funds Except Devotional Share, Docket No. 2008–5 CRB SD 1999–2000 (Jun. 19, 2013) and Order Granting In Part Motion for Final Distribution of the 1998 and 1999 Cable Royalty Funds and the 1999 Satellite Royalty Funds, Docket Nos. 2008–1 CRB CD 98–99 and 2008–5 CRB SD 1999–2000 (Jan. 31, 2013).

[2] In its opposition, MPAA provides what it calls a ''good faith estimate of the dollar amounts of the shares requested'' by IPG for cable royalties. *MPAA Opposition* at 2–3. MPAA does not explain the methodology it used to derive the estimates. In its reply, IPG questions the accuracy of MPAA's estimates, which IPG states are ''substantially lower than what was previously reported by the MPAA to IPG to be the Program Supplier share of such royalty pools.'' *Independent Producer Group's Reply in Support of Motion for Partial Distribution of 2004–2009 Cable Royalties and 2000–2009 Satellite Royalties* (''IPG Reply'') at 1–2 (Oct. 1, 2015). MPAA, in turn, filed a motion to strike IPG's reply which motion the Judges denied because it was not ripe. *MPAA Motion to Strike IPG's Reply . . .* (Oct. 6, 2015); *Order Denying MPAA Motion to Strike IG's Reply* (December 10, 2015).

2009 satellite funds, arguing that MPAA's ''unfounded assertion . . . is simply inaccurate . . .'' *Id.* at 6.[3]

Lastly, IPG discounts the above-quoted passage from the Judges' February 11, 2014 *Order Denying IPG Motion for Partial Distribution* regarding the Judges' concerns about IPG's ability and willingness to disgorge funds should the need arise. IPG contends that the Judges' concern expressed in that order (which IPG contends was ''unwarranted'') ''was inspired by nothing more than inflammatory rhetoric of the [Settling Devotional Claimants].'' *IPG Reply* at 7.

Before authorizing a partial distribution of royalty funds requested under Section 801(b)(3)(C) of the Copyright Act, the Judges must first publish a notice in the **Federal Register** seeking responses to the request to ascertain whether any claimant entitled to receive such royalty fees has a reasonable objection to the proposed distribution. This Notice seeks comments on whether any interested claimant asserts a reasonable objection to IPG's request. The Judges must receive written objections detailing the existence and extent of any entity's objection(s) by the end of the comment period. The Judges will not consider any objections with respect to the partial distribution motion that come to their attention after the close of that period.

In particular, the Judges seek comment on whether IPG should be considered an ''established claimant'' for purposes of receiving a partial distribution of royalties, and, if so, for what years and for which Phase I categories, and for which funds. For example, assuming for the sake of argument that IPG is deemed an ''established claimant'' with respect to the Phase I Program Suppliers Category for cable for a particular year, does that status carry over to other Phase I categories (*e.g.,* Devotionals, Joint Sports, etc.)? Does it carry over to all years? If not, to which years does the ''established claimant'' status apply? Moreover, does the status of an established cable claimant (or claimant representative) carry over to satellite royalties, as IPG contends, or only to cable royalties? Does the reverse also apply (*i.e.,* is an ''established claimant'' for purposes of satellite also an ''established claimant'' for cable)?

[3] The Judges note that MPAA proposed a Program Suppliers satellite share allocation to IPG of 0.20% in 2002 and 0.13% in 2004. For the eight remaining years in controversy, MPAA proposed shares higher than 0.20%. *MPAA-Represented Program Suppliers' Proposed Findings of Fact and Conclusions of Law* at 7 (Aug. 17, 2015).

If the Judges determine that IPG is an ''established claimant'' for the first time for any fund, are there safeguards (in addition to the pay-back agreement) the Judges can and should employ to ensure that IPG is able and willing to disgorge in the event of overpaid funds? Which safeguards would be appropriate or necessary? How long should they last and how would they be enforced?

If the Judges determine that IPG is entitled to the partial distribution it requests, what methodology should the Judges use to determine the dollar amount to which IPG is entitled? Would it be necessary for the Judges (or the Licensing Division of the Copyright Office, or both) to have access to all applicable Phase I confidential agreements to make the necessary calculations or is another means available? Commenters should consider what special calculations would have to be made to determine IPG's share of the various subfunds (Basic, Syndex and 3.75%) in addition to calculating interest on (and deductions of applicable expenses against) funds deposited with the Licensing Division.

The issues and questions set forth above are not necessarily exhaustive. Commenters may address any other issues or questions that they believe are relevant to the pending Motion.

The Copyright Royalty Board has posted IPG's Motion at *http://www.loc.gov/crb.*

Dated: December 10, 2015.

Jesse M. Feder,

U.S. Copyright Royalty Judge.

[FR Doc. 2015–31629 Filed 12–15–15; 8:45 am]

BILLING CODE 1410–72–P

NATIONAL SCIENCE FOUNDATION

Notice of Permits Issued Under the Antarctic Conservation Act of 1978

AGENCY: National Science Foundation.

ACTION: Notice of permits issued under the Antarctic Conservation of 1978, Public Law 95–541.

SUMMARY: The National Science Foundation (NSF) is required to publish notice of permits issued under the Antarctic Conservation Act of 1978. This is the required notice.

FOR FURTHER INFORMATION CONTACT: Nature McGinn, ACA Permit Officer, Division of Polar Programs, Rm. 755, National Science Foundation, 4201 Wilson Boulevard, Arlington, VA 22230. Or by email: *ACApermits@nsf.gov.*

SUPPLEMENTARY INFORMATION: On November 5, 2015 the National Science Foundation published a notice in the **Federal Register** of a permit application received. The permit was issued on December 11, 2015 to:

Joseph Wilson, Penguin Films, Ltd. Permit No. 2016–022

Nadene G. Kennedy,

Polar Coordination Specialist, Division of Polar Programs.

[FR Doc. 2015–31637 Filed 12–15–15; 8:45 am]

BILLING CODE 7555–01–P

NATIONAL SCIENCE FOUNDATION

Notice of Permits Issued Under the Antarctic Conservation Act of 1978

AGENCY: National Science Foundation.

ACTION: Notice of permits issued under the Antarctic Conservation of 1978, Public Law 95–541.

SUMMARY: The National Science Foundation (NSF) is required to publish notice of permits issued under the Antarctic Conservation Act of 1978. This is the required notice.

FOR FURTHER INFORMATION CONTACT: Nature McGinn, ACA Permit Officer, Division of Polar Programs, Rm. 755, National Science Foundation, 4201 Wilson Boulevard, Arlington, VA 22230. Or by email: *ACApermits@nsf.gov.*

SUPPLEMENTARY INFORMATION: On November 9, 2015 the National Science Foundation published a notice in the **Federal Register** of a permit application received. The permit was issued on December 10, 2015 to:

Vincent J. LiCata Permit No. 2016–017

Nadene G. Kennedy,

Polar Coordination Specialist, Division of Polar Programs.

[FR Doc. 2015–31591 Filed 12–15–15; 8:45 am]

BILLING CODE 7555–01–P

NUCLEAR REGULATORY COMMISSION

[Docket Nos. 50–244 and 72–67; NRC–2015–0249]

Exelon Generation Company, LLC; R.E. Ginna Nuclear Power Plant

AGENCY: Nuclear Regulatory Commission.

ACTION: Finding of no significant impact with associated environmental assessment; final issuance.

SUMMARY: The U.S. Nuclear Regulatory Commission (NRC) is issuing an environmental assessment (EA) and finding of no significant impact (FONSI) related to a request to amend Renewed Facility Operating License No. DPR–18,

issued to Exelon Generation Company, LLC (Exelon, ''the licensee''), for operation of the R.E. Ginna Nuclear Power Plant (hereinafter ''Ginna,'' or ''the facility''), including the general-licensed Independent Spent Fuel Storage Installation, Docket No. 72–67, located in Wayne County, NY. The requested amendment would permit licensee security personnel to use certain firearms and ammunition feeding devices not previously permitted, notwithstanding State, local, and certain Federal firearms laws or regulations that otherwise prohibit such actions.

ADDRESSES: Please refer to Docket ID NRC–2015–0249 when contacting the NRC about the availability of information regarding this document. You may obtain publicly-available information related to this document using any of the following methods:

- *Federal Rulemaking Web site:* Go to *http://www.regulations.gov* and search for Docket ID NRC–2015–0249. Address questions about NRC dockets to Carol Gallagher; telephone: 301–415–3463; email: *Carol.Gallagher@nrc.gov.* For technical questions, contact the individual listed in the **FOR FURTHER INFORMATION CONTACT** section of this document.
- *NRC's Agencywide Documents Access and Management System (ADAMS):* You may obtain publicly-available documents online in the ADAMS Public Documents collection at *http://www.nrc.gov/reading-rm/adams.html.* To begin the search, select ''*ADAMS Public Documents*'' and then select ''*Begin Web-based ADAMS Search.*'' For problems with ADAMS, please contact the NRC's Public Document Room (PDR) reference staff at 1–800–397–4209, 301–415–4737, or by email to *pdr.resource@nrc.gov.* The ADAMS accession number for each document referenced (if that document is available in ADAMS) is provided the first time a document is referenced. The application for amendment for Ginna dated August 14, 2013, was supplemented by letters dated November 4, 2013, May 14, 2014, and January 16, 2015 (ADAMS Accession Nos. ML13228A265, ML13312A921, ML14139A342, and ML15020A100, respectively). Those letters containing SUNSI are being withheld from public disclosure.
- *NRC's PDR:* You may examine and purchase copies of public documents at the NRC's PDR, Room O1–F21, One White Flint North, 11555 Rockville Pike, Rockville, Maryland 20852

FOR FURTHER INFORMATION CONTACT: Diane Render, Office of Nuclear Reactor Regulation, U.S. Nuclear Regulatory Commission, Washington DC 20555–0001, telephone: 301–415–3629, email: *Diane.Render@nrc.gov.*

SUPPLEMENTARY INFORMATION:

I. Introduction

The NRC is considering a request to amend Renewed Facility Operating License No. DPR–18, issued to Exelon for operation of Ginna, including the general-licensed Independent Spent Fuel Storage Installation, Docket No. 72–67, located in Wayne County, NY, in accordance with 10 CFR 50.90 of title 10 of the *Code of Federal Regulations* (10 CFR). Consistent with 10 CFR 51.21, the NRC has reviewed the requirements of 10 CFR 51.20(b) and 10 CFR 51.22(c) and determined that an EA is the appropriate form of environmental review. Based on the results of the EA, the NRC is issuing this final FONSI. The requested amendment would permit licensee security personnel to use certain firearms and ammunition feeding devices not previously permitted, notwithstanding State, local, and certain Federal firearms laws or regulations that otherwise prohibit such actions.

The NRC published a draft EA and FONSI on the proposed action for public comment in the **Federal Register** on October 29, 2015 (80 FR 66586). No comments were received.

II. Environmental Assessment

Identification of the Proposed Action

The proposed action would permit security personnel at Ginna, in the performance of official duties, to transfer, receive, possess, transport, import, and use certain firearms and large capacity ammunition feeding devices not previously permitted to be owned or possessed, notwithstanding State, local, and certain Federal firearms laws, or regulations, that otherwise prohibit such actions.

The proposed action is in accordance with Exelon's application dated August 14, 2013, as supplemented by letters dated November 4, 2013, May 14, 2014, and January 16, 2015.

The Need for the Proposed Action

The proposed action would allow the transfer, receipt, possession, transportation, importation and use of those firearms and devices needed in the performance of official duties required for the protection of Ginna and associated special nuclear material, as stated in the Ginna NRC-approved security plan.

Environmental Impacts of the Proposed Action

The NRC has completed its evaluation of the proposed action and concludes that the proposed action would only allow the use of those firearms and devices necessary to protect Ginna and associated special nuclear material, consistent with the Ginna NRC-approved security plan. Therefore, the proposed action would not significantly increase the probability or consequences of accidents. In addition, the proposed action would not change the types and the amounts of any effluents that may be released offsite. There would also be no significant increase in occupational or public radiation exposure. Therefore, there would be no significant radiological environmental impacts associated with the proposed action.

The proposed action would not impact land, air, or water resources, including biota. In addition, the proposed action would not result in any socioeconomic or environmental justice impacts or impacts to historic and cultural resources. Therefore, there would also be no significant non-radiologial environmental impacts associated with the proposed action.

Accordingly, the NRC concludes that the issuance of the requested amendment would not result in significant environmental impacts.

Details of the NRC's evaluation will be included in a letter to the licensee.

Environmental Impacts of the Alternatives to the Proposed Action

As an alternative to the proposed action, the NRC staff considered denying the proposed action (*i.e.*, the ''no-action'' alternative). Denial of the license amendment request would result in no change in current environmental conditions at the Ginna.

Alternative Use of Resources

The proposed action would not involve the use of any resources.

Agencies and Persons Consulted

The staff did not consult with any other Federal Agency or State of New York agencies regarding the environmental impact of the proposed action.

III. Finding of No Significant Impact

The licensee has requested a license amendment to permit licensee security personnel, in the performance of official duties, to transfer, receive, possess, transport, import, and use certain firearms and large capacity ammunition feeding devices not previously permitted to be owned or possessed, notwithstanding State, local, and certain

Federal firearms laws, or regulations that would otherwise prohibit such actions.

On the basis of the information presented in this environmental assessment, the NRC concludes that the proposed action would not cause any significant environmental impact and would not have a significant effect on the quality of the human environment. In addition, the NRC has determined that an environmental impact statement is not necessary for the evaluation of this proposed action.

Other than the licensee's letter dated August 14, 2013, there are no other environmental documents associated with this review. This document is available for public inspection as indicated above.

Dated at Rockville, Maryland, this 8th day of December 2015.

For the Nuclear Regulatory Commission.

Travis L. Tate,

Chief Plant, Licensing Branch I–1, Division of Operating Reactor Licensing, Office of Nuclear Reactor Regulation.

[FR Doc. 2015–31653 Filed 12–15–15; 8:45 am]

BILLING CODE 7590–01–P

NUCLEAR REGULATORY COMMISSION

[Docket Nos. 50–333 and 72–12; NRC–2015–0247]

Entergy Nuclear Operations, Inc., James A. FitzPatrick Nuclear Power Plant

AGENCY: Nuclear Regulatory Commission.

ACTION: Finding of no significant impact with associated environmental assessment; final issuance.

SUMMARY: The U.S. Nuclear Regulatory Commission (NRC) is issuing an environmental assessment (EA) and finding of no significant impact (FONSI) related to a request to amend Renewed Facility Operating License No. DPR–59, including the general licensed Independent Spent Fuel Storage Installation, issued to Entergy Nuclear Operations, Inc. (ENO, ''the licensee''), for operation of the James A. FitzPatrick Nuclear Power Plant (hereinafter ''JAFNPP'' or ''the facility''), located in Oswego County, New York. The requested amendment would permit licensee security personnel to use certain firearms and ammunition feeding devices not previously permitted, notwithstanding State, local, and certain Federal firearms laws or regulations that otherwise prohibit such actions.

ADDRESSES: Please refer to Docket ID NRC–2015–0247 when contacting the NRC about the availability of information regarding this document. You may obtain publicly-available information related to this document using any of the following methods:

- *Federal Rulemaking Web site:* Go to *http://www.regulations.gov* and search for Docket ID NRC–2015–0247. Address questions about NRC dockets to Carol Gallagher; telephone: 301–415–3463; email: *Carol.Gallagher@nrc.gov.* For technical questions, contact the individual listed in the **FOR FURTHER INFORMATION CONTACT** section of this document.
- *NRC's Agencywide Documents Access and Management System (ADAMS):* You may obtain publicly-available documents online in the ADAMS Public Documents collection at *http://www.nrc.gov/reading-rm/adams.html.* To begin the search, select ''*ADAMS Public Documents*'' and then select ''*Begin Web-based ADAMS Search.*'' For problems with ADAMS, please contact the NRC's Public Document Room (PDR) reference staff at 1–800–397–4209, 301–415–4737, or by email to *pdr.resource@nrc.gov.* The ADAMS accession number for each document referenced (if that document is available in ADAMS) is provided the first time a document is referenced. The application for amendment for JAFNPP dated August 30, 2013, was supplemented by letters dated November 12, 2013, May 14 and July 11, 2014, and January 15, 2015 (ADAMS Accession Nos. ML13248A517, ML13317A928, ML14135A327, ML14195A040, and ML15015A637, respectively). Those letters containing SUNSI are being withheld from public disclosure.
- *NRC's PDR:* You may examine and purchase copies of public documents at the NRC's PDR, Room O1–F21, One White Flint North, 11555 Rockville Pike, Rockville, Maryland 20852.

FOR FURTHER INFORMATION CONTACT: Douglas V. Pickett, Office of Nuclear Reactor Regulation, U.S. Nuclear Regulatory Commission, Washington, DC 20555–0001, telephone: 301–415–1364, email: *Douglas.Pickett@nrc.gov.*

SUPPLEMENTARY INFORMATION:

I. Introduction

The NRC is considering a request to amend Renewed Facility Operating License No. DPR–59, including the general licensed Independent Spent Fuel Storage Installation, issued to ENO for operation of the JAFNPP located in Oswego County, New York, in accordance with 10 CFR 50.90 of title 10 of the *Code of Federal Regulations* (10 CFR). Consistent with 10 CFR 51.21, the NRC has reviewed the requirements in 10 CFR 51.20(b) and 10 CFR 51.22(c) and determined that an EA is the appropriate form of environmental review. Based on the results of the EA, the NRC is issuing this final FONSI. The requested amendment would permit licensee security personnel to use certain firearms and ammunition feeding devices not previously permitted, notwithstanding State, local, and certain Federal firearms laws or regulations that otherwise prohibit such actions.

The NRC published a draft EA and FONSI on the proposed action for public comment in the **Federal Register** on October 29, 2015 (80 FR 66584). No comments were received.

II. Environmental Assessment

Identification of the Proposed Action

The proposed action would permit security personnel at the JAFNPP, in the performance of official duties, to transfer, receive, possess, transport, import, and use certain firearms and large capacity ammunition feeding devices not previously permitted to be owned or possessed, notwithstanding State, local, and certain Federal firearms laws, or regulations, that otherwise prohibit such actions.

The proposed action is in accordance with ENO's application dated August 30, 2013, as supplemented by letters dated November 12, 2013, May 14 and July 11, 2014, and January 15, 2015.

The Need for the Proposed Action

The proposed action would allow the transfer, receipt, possession, transportation, importation and use of those firearms and devices needed in the performance of official duties required for the protection of the JAFNPP and associated special nuclear materials, consistent with the JAFNPP NRC approved security plan.

Environmental Impacts of the Proposed Action

The NRC has completed its evaluation of the proposed action and concludes that the proposed action would only allow the use of those firearms and devices necessary to protect JAFNPP and associated special nuclear material, consistent with the JAFNPP NRC-approved security plan. Therefore, the proposed action would not significantly increase the probability or consequences of accidents. In addition, the proposed action would not change the types and the amounts of any effluents that may be released offsite. There would also be no

significant increase in occupational or public radiation exposure. Therefore, there would be no significant radiological environmental impacts associated with the proposed action.

The proposed action would not impact land, air, or water resources, including biota. In addition, the proposed action would not result in any socioeconomic or environmental justice impacts or impacts to historic and cultural resources. Therefore, there would also be no significant non-radiological environmental impacts associated with the proposed action.

Accordingly, the NRC concludes that the issuance of the requested amendment would not result in significant environmental impacts.

Details of the NRC's evaluation will be included in a letter to the licensee.

Environmental Impacts of the Alternatives to the Proposed Action

As an alternative to the proposed action, the NRC staff considered denying the proposed action (*i.e.,* the ''no-action'' alternative). Denial of the license amendment request would result in no change in current environmental conditions at the JAFNPP.

Alternative Use of Resources

The proposed action would not involve the use of any resources.

Agencies and Persons Consulted

The staff did not consult with any Federal Agency or New York state agencies regarding the environmental impact of the proposed action.

III. Finding of No Significant Impact

The licensee has requested a license amendment to permit licensee security personnel, in the performance of official duties, to transfer, receive, possess, transport, import, and use certain firearms and large capacity ammunition feeding devices not previously permitted to be owned or possessed, notwithstanding State, local, and certain Federal firearms laws, or regulations that would otherwise prohibit such actions.

On the basis of the information presented in this environmental assessment, the NRC concludes that the proposed action would not cause any significant environmental impact and would not have a significant effect on the quality of the human environment. In addition, the NRC has determined that an environmental impact statement is not necessary for the evaluation of this proposed action.

Other than the licensee's letter dated August 30, 2013, there are no other environmental documents associated with this review. This document is available for public inspection as indicated above.

Dated at Rockville, Maryland, this 8th day of December 2015.

For the Nuclear Regulatory Commission.

Travis L. Tate,

Chief, Plant Licensing Branch I–1, Division of Operating Reactor Licensing, Office of Nuclear Reactor Regulation.

[FR Doc. 2015–31635 Filed 12–15–15; 8:45 am]

BILLING CODE 7590–01–P

NUCLEAR REGULATORY COMMISSION

[Docket Nos. 50–220, 50–410, and 72–1036; NRC–2015–0248]

Exelon Generation Company, LLC; Nine Mile Point Nuclear Station, Units 1 and 2

AGENCY: Nuclear Regulatory Commission.

ACTION: Finding of no significant impact with associated environmental assessment; final issuance.

SUMMARY: The U.S. Nuclear Regulatory Commission (NRC) is issuing an environmental assessment (EA) and finding of no significant impact (FONSI) related to a request to amend Renewed Facility Operating License No. DPR–63, NPR–69 and Docket No. 72–1036, issued to Exelon Generation Company, LLC (Exelon, ''the licensee''), for operation of the Nine Mile Point Nuclear Station, Units 1 and 2, including the general-licensed Independent Spent Fuel Storage Installation (hereinafter ''NMP'' or ''the facility''), located in Oswego County, NY. The requested amendment would permit licensee security personnel to use certain firearms and ammunition feeding devices not previously permitted, notwithstanding State, local, and certain Federal firearms laws or regulations that otherwise prohibit such actions.

ADDRESSES: Please refer to Docket ID NRC–2015–0248 when contacting the NRC about the availability of information regarding this document. You may obtain publicly-available information related to this document using any of the following methods:

- *Federal Rulemaking Web site:* Go to *http://www.regulations.gov* and search for Docket ID NRC–2015–0248. Address questions about NRC dockets to Carol Gallagher; telephone: 301–415–3463; email: *Carol.Gallagher@nrc.gov.* For technical questions, contact the individual(s) listed in the **FOR FURTHER INFORMATION CONTACT** section of this document.
- *NRC's Agencywide Documents Access and Management System (ADAMS):* You may obtain publicly-available documents online in the ADAMS Public Documents collection at *http://www.nrc.gov/reading-rm/adams.html.* To begin the search, select ''*ADAMS Public Documents*'' and then select ''*Begin Web-based ADAMS Search.*'' For problems with ADAMS, please contact the NRC's Public Document Room (PDR) reference staff at 1–800–397–4209, 301–415–4737, or by email to *pdr.resource@nrc.gov.* The ADAMS accession number for each document referenced in this notice (if that document is available in ADAMS) is provided the first time that a document is referenced. The application for amendment for Nine Mile Point Nuclear Station, Units 1 and 2 (NMP) dated August 14, 2013, was supplemented by letters dated September 10, 2013, May 14, 2014, and January 16, 2015 (ADAMS Accession Nos. ML13228A265, ML13260A257, ML14139A342, and ML15020A100, respectively). Those letters containing SUNSI are being withheld from public disclosure.
- *NRC's PDR:* You may examine and purchase copies of public documents at the NRC's PDR, Room O1–F21, One White Flint North, 11555 Rockville Pike, Rockville, Maryland 20852.

FOR FURTHER INFORMATION CONTACT: Brenda L. Mozafari, Office of Nuclear Reactor Regulation, U.S. Nuclear Regulatory Commission, Washington DC 20555–0001; telephone: 301–415–2020, email: *Brenda.Mozafari@nrc.gov.*

SUPPLEMENTARY INFORMATION:

I. Introduction

The NRC is considering a request to amend Renewed Facility Operating License Nos. DPR–63, NPR–69, and Docket No. 72–1036, issued to Exelon for operation of NMP located in Oswego County, New York, in accordance with 10 CFR 50.90 of title 10 of the *Code of Federal Regulations* (10 CFR). Consistent with 10 CFR 51.21, the NRC has reviewed the requirements in 10 CFR 51.20(b) and 10 CFR 51.22(c) and determined that an EA is the appropriate form of environmental review. Based on the results of the EA, the NRC is issuing this final FONSI. The requested amendment would permit licensee security personnel to use certain firearms and ammunition feeding devices not previously permitted, notwithstanding State, local, and certain Federal firearms laws or regulations that otherwise prohibit such actions.

The NRC published a draft EA and FONSI on the proposed action for public comment in the **Federal Register** on October 29, 2015 (80 FR 66588). No comments were received.

II. Environmental Assessment

Identification of the Proposed Action

The proposed action would permit security personnel at NMP, in the performance of official duties, to transfer, receive, possess, transport, import, and use certain firearms and large capacity ammunition feeding devices not previously permitted to be owned or possessed, notwithstanding State, local, and certain Federal firearms laws, or regulations, that otherwise prohibit such actions.

The proposed action is in accordance with Exelon's application dated August 14, 2013, as supplemented by letters dated September 10, 2013, May 14, 2014, and January 16, 2015.

The Need for the Proposed Action

The proposed action would allow the transfer, receipt, possession, transportation, importation and use of those firearms and devices needed in the performance of official duties required for the protection of NMP and associated special nuclear material, consistent with the NMP NRC-approved security plan.

Environmental Impacts of the Proposed Action

The NRC has completed its evaluation of the proposed action and concludes that the proposed action would only allow the use of those firearms and devices necessary to protect NMP and associated special nuclear material, consistent with the NMP NRC-approved security plan. Therefore, the proposed action would not significantly increase the probability or consequences of accidents. In addition, the proposed action would not change the types and the amounts of any effluents that may be released offsite. There would also be no significant increase in occupational or public radiation exposure. Therefore, there would be no significant radiological environmental impacts associated with the proposed action.

The proposed action would not impact land, air, or water resources, including biota. In addition, the proposed action would not result in any socioeconomic or environmental justice impacts or impacts to historic and cultural resources. Therefore, there would also be no significant non-radiological environmental impacts associated with the proposed action.

Accordingly, the NRC concludes that the issuance of the requested amendment would not result in significant environmental impacts.

Details of the NRC's evaluation will be included in a letter to the licensee.

Environmental Impacts of the Alternatives to the Proposed Action

As an alternative to the proposed action, the NRC staff considered denying the proposed action (*i.e.*, the ''no-action'' alternative). Denial of the license amendment request would result in no change in current environmental conditions at NMP.

Alternative Use of Resources

The proposed action would not involve the use of any resources.

Agencies and Persons Consulted

The staff did not consult with any other Federal Agency or State of New York agencies regarding the environmental impact of the proposed action.

III. Finding of No Significant Impact

The licensee has requested a license amendment to permit licensee security personnel, in the performance of official duties, to transfer, receive, possess, transport, import, and use certain firearms and large capacity ammunition feeding devices not previously permitted to be owned or possessed notwithstanding State, local, and certain Federal firearms laws, or regulations that would otherwise prohibit such actions.

On the basis of the information presented in this environmental assessment, the NRC concludes that the proposed action would not cause any significant environmental impact and would not have a significant effect on the quality of the human environment. In addition, the NRC has determined that an environmental impact statement is not necessary for the evaluation of this proposed action.

Other than the licensee's letter dated August 14, 2013, there are no other environmental documents associated with this review.

Dated at Rockville, Maryland, this 8th day of December 2015.

For the Nuclear Regulatory Commission.

Travis L. Tate,

Chief, Plant Licensing Branch I–1, Division of Operating Reactor Licensing, Office of Nuclear Reactor Regulation.

[FR Doc. 2015–31652 Filed 12–15–15; 8:45 am]

BILLING CODE 7590–01–P

NUCLEAR REGULATORY COMMISSION

[Docket Nos. 72–10; NRC–2013–0251]

Northern States Power Company—Minnesota; Prairie Island Nuclear Generating Plant Independent Spent Fuel Storage Installation

AGENCY: Nuclear Regulatory Commission.

ACTION: License renewal; issuance.

SUMMARY: The U.S. Nuclear Regulatory Commission (NRC) has issued a renewed license to Northern States Power Company—Minnesota (NSPM) for its Materials License SNM–2506 for the receipt, possession, transfer, and storage of spent fuel at the Prairie Island Nuclear Generating Plant (Prairie Island) Independent Spent Fuel Storage Installation (ISFSI), located in Goodhue County, Minnesota. The renewed license authorizes operation of the Prairie Island ISFSI in accordance with the provisions of the renewed license and its Technical Specifications (TS). The renewed license expires on October 31, 2053.

DATES: December 16, 2015.

ADDRESSES: Please refer to Docket ID NRC–2013–0251 when contacting the NRC about the availability of information regarding this document. You may obtain publicly-available information related to this document using any of the following methods:

- *Federal Rulemaking Web site:* Go to *http://www.regulations.gov* and search for Docket ID NRC–2013–0251. Address questions about NRC dockets to Carol Gallagher; telephone: 301–415–3463; email: *Carol.Gallagher@nrc.gov.* For technical questions, contact the individual listed in the **FOR FURTHER INFORMATION CONTACT** section of this document.
- *NRC's Agencywide Documents Access and Management System (ADAMS):* You may obtain publicly-available documents online in the ADAMS Public Documents collection at *http://www.nrc.gov/reading-rm/adams.html.* To begin the search, select ''*ADAMS Public Documents*'' and then select ''*Begin Web-based ADAMS Search.*'' For problems with ADAMS, please contact the NRC's Public Document Room (PDR) reference staff at 1–800–397–4209, 301–415–4737, or by email to *pdr.resource@nrc.gov.* For the convenience of the reader, the ADAMS accession numbers are provided in a table in the ''Availability of Documents'' Section II of this document.
- *NRC's PDR:* You may examine and purchase copies of public documents at

the NRC's PDR, Room O1–F21, One White Flint North, 11555 Rockville Pike, Rockville, Maryland 20852.

FOR FURTHER INFORMATION CONTACT: John-Chau Nguyen, Office of Nuclear Material Safety and Safeguards, U.S. Nuclear Regulatory Commission, Washington, DC 20555; telephone: 301–415–0262; email: *John-chau.Nguyen@nrc.gov.*

SUPPLEMENTARY INFORMATION:

I. Discussion

Based upon the application dated October 20, 2011, as supplemented February 29, 2012, April 26, 2012, July 26, 2013, July 31, 2014, September 3, 2014, and October 12, 2015, the NRC has issued a renewed license to NSPM, for its Prairie Island ISFSI, located in Goodhue County, Minnesota. The renewed license authorizes and requires operation of the Prairie Island ISFSI in accordance with the provisions of the renewed license and its TS. The renewed license will expire on October 31, 2053. The NSPM's application for a renewed license complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act), and the NRC's rules and regulations. The NRC has made appropriate findings as required by the Act and the NRC's regulations in Chapter 1 of title 10 of the *Code of Federal Regulations* (10 CFR), and sets forth those findings in the renewed license. The agency afforded an opportunity for a hearing in the Notice of Opportunity for a Hearing published in the **Federal Register** on June 25, 2012 (77 FR 37937).

The NRC staff prepared a safety evaluation report for the renewal of the ISFSI license and concluded, based on that evaluation, the ISFSI will continue to meet the regulations in 10 CFR part 72. The NRC staff also prepared a draft environmental assessment (EA) and finding of no significant impact (FONSI) for the renewal of this license in November 19, 2013 (78 FR 69460). The final EA and FONSI, were published on July 1, 2015 (80 FR 37662). The NRC staff's consideration of the impacts of continued storage of spent nuclear fuel (as documented in NUREG–2157, ''Generic Environmental Impact Statement for Continued Storage of Spent Fuel'') was included as an appendix to the EA. The NRC staff concluded that renewal of this ISFSI license will not have a significant impact on the quality of the human environment.

II. Availability of Documents

The following table includes the ADAMS accession numbers for the documents referenced in this notice. For additional information on accessing ADAMS, see the **ADDRESSES** section of this document.

Document	ADAMS accession No.
NSPM's application, dated October 20, 2011	ML11304A068
Response to Request for Supplemental Information, dated February 29, 2012	ML12065A073
Response to License Renewal Observations, dated April 26, 2012	ML121170406
Response to First Request for Additional Information, dated July 26, 2013	ML13210A272
Response to Second Request for Additional Information, dated July 31, 2014	ML14234A463
Supplement to PINGP ISFSI License Renewal Application for Prairie Island Independent Spent Fuel Storage Installation- Revised Safety Analysis Report Information	ML14247A316
Supplement to PINGP ISFSI License Renewal Application-Revised LRA Appendix C	ML14282A814
NRC Environmental Assessment	ML15098A026
NRC Safety Evaluation Report	ML15336A230
Supplement to PINGP ISFSI License Renewal Application-AMP Rev 2	ML15285A007
NUREG–2157, Generic Environmental Impact Statement for Continued Storage of Spent Fuel, Volume 1	ML14196A105
NUREG–2157, Generic Environmental Impact Statement for Continued Storage of Spent Fuel, Volume 2	ML14196A107

Dated at Rockville, Maryland, this 9th day of December 2015.

For the Nuclear Regulatory Commission.

Steve Ruffin,

Acting Chief, Spent Fuel Licensing Branch, Division of Spent Fuel Management, Office of Nuclear Material Safety and Safeguards.

[FR Doc. 2015–31636 Filed 12–15–15; 8:45 am]

BILLING CODE 7590–01–P

NUCLEAR REGULATORY COMMISSION

[Docket Nos. 50–003, 50–247, 50–286, and 72–5; NRC–2015–0246]

Entergy Nuclear Operations, Inc.; Indian Point Nuclear Generating, Unit Nos. 1, 2, and 3

AGENCY: Nuclear Regulatory Commission.

ACTION: Finding of no significant impact with associated environmental assessment; final issuance.

SUMMARY: The U.S. Nuclear Regulatory Commission (NRC) is issuing an environmental assessment (EA) and finding of no significant impact (FONSI) related to a request to amend Provisional Operating License No. DPR–5, and Facility Operating Licenses Nos. DPR–26 and DPR–64, including the general licensed Independent Spent Fuel Storage Installation, Docket No. 72–51, issued to Entergy Nuclear Operations, Inc. (ENO, ''the licensee''), for operation of the Indian Point Nuclear Generating, Unit Nos. 1, 2 and 3, (hereinafter ''Indian Point'' or ''the facility''), located in Westchester County, New York. The requested amendment would permit licensee security personnel to use certain firearms and ammunition feeding devices not previously permitted, notwithstanding State, local, and certain Federal firearms laws or regulations that otherwise prohibit such actions.

ADDRESSES: Please refer to Docket ID NRC–2015–0246 when contacting the NRC about the availability of information regarding this document. You may obtain publicly-available information related to this document using any of the following methods:

- *Federal Rulemaking Web site:* Go to *http://www.regulations.gov* and search for Docket ID NRC–2015–0246. Address questions about NRC dockets to Carol Gallagher; telephone: 301–415–3463; email: *Carol.Gallagher@nrc.gov.* For technical questions, contact the individual listed in the **FOR FURTHER INFORMATION CONTACT** section of this document.
- *NRC's Agencywide Documents Access and Management System (ADAMS):* You may obtain publicly-available documents online in the ADAMS Public Documents collection at *http://www.nrc.gov/reading-rm/adams.html.* To begin the search, select ''*ADAMS Public Documents*'' and then select ''*Begin Web-based ADAMS Search.*'' For problems with ADAMS, please contact the NRC's Public

Document Room (PDR) reference staff at 1–800–397–4209, 301–415–4737, or by email to *pdr.resource@nrc.gov.* The ADAMS accession number for each document referenced (if that document is available in ADAMS) is provided the first time that a document is referenced. The application for amendment for Indian Point dated August 20, 2013, was supplemented by letters dated November 21, 2013, May 13 and July 24, 2014, and January 16, 2015 (ADAMS Accession Nos. ML13239A447, ML13354B780, ML14149A247, ML14219A326, and ML15030A031, respectively), and citing letters dated April 27 and October 27, 2011, and January 4, 2012 (ADAMS Accession Nos. ML11124A075, ML11314A070, and ML12019A048, respectively). Those letters containing SUNSI are being withheld from public disclosure.

- *NRC's PDR:* You may examine and purchase copies of public documents at the NRC's PDR, Room O1–F21, One White Flint North, 11555 Rockville Pike, Rockville, Maryland 20852.

FOR FURTHER INFORMATION CONTACT: Douglas V. Pickett, Office of Nuclear Reactor Regulation, U.S. Nuclear Regulatory Commission, Washington DC 20555–0001, telephone: 301–415–1364, email: *Douglas.Pickett@nrc.gov.*

SUPPLEMENTARY INFORMATION:

I. Introduction

The NRC is considering a request to amend Provisional Operating License No. DPR–5, and Facility Operating License Nos. DPR–26 and DPR–64, issued to ENO for operation of Indian Point, including the general-licensed Independent Spent Fuel Storage Installation, Docket No. 72–51, located in Westchester County, NY, in accordance with 10 CFR 50.90 of title 10 of the *Code of Federal Regulations* (10 CFR). Consistent with 10 CFR 51.21, the NRC has reviewed the requirements in 10 CFR 51.20(b) and 10 CFR 51.22(c) and determined that an environmental assessment is the appropriate form of environmental review. Based on the results of the EA, the NRC is issuing this final FONSI. The requested amendment would permit licensee security personnel to use certain firearms and ammunition feeding devices not previously permitted, notwithstanding State, local, and certain Federal firearms laws or regulations that otherwise prohibit such actions.

The NRC published a draft EA and FONSI on the proposed action for public comment in the **Federal Register** on October 29, 2015 (80 FR 66583). No comments were received.

II. Environmental Assessment

Identification of the Proposed Action

The proposed action would permit security personnel at Indian Point, in the performance of their official duties, to transfer, receive, possess, transport, import, and use certain firearms, and large capacity ammunition feeding devices not previously permitted to be owned or possessed, notwithstanding State, local, and certain Federal firearms laws, or regulations that otherwise prohibit such actions.

The proposed action is in accordance with ENO's application dated August 20, 2013, as supplemented by letters dated November 21, 2013, May 13 and July 24, 2014, and January 16, 2015, and citing letters dated April 27 and October 27, 2011, and January 4, 2012.

The Need for the Proposed Action

The proposed action would allow the transfer, receipt, possession, transportation, importation and use of those firearms and devices needed in the performance of official duties required for the protection of Indian Point and associated special nuclear materials, consistent with the Indian Point NRC-approved security plan.

Environmental Impacts of the Proposed Action

The NRC has completed its evaluation of the proposed action and concludes that the proposed action would only allow the use of those firearms and devices necessary to protect Indian Point and associated special nuclear material, consistent with the Indian Point NRC-approved security plan. Therefore, the proposed action would not significantly increase the probability or consequences of accidents. In addition, the proposed action would not change the types and the amounts of any effluents that may be released offsite. There would also be no significant increase in occupational or public radiation exposure. Therefore, there would be no significant radiological environmental impacts associated with the proposed action.

The proposed action would not impact land, air, or water resources, including biota. In addition, the proposed action would not result in any socioeconomic or environmental justice impacts or impacts to historic and cultural resources. Therefore, there would also be no significant non-radiological environmental impacts associated with the proposed action.

Accordingly, the NRC concludes that issuance of the requested amendment would not result in significant environmental impacts.

Details of the NRC's evaluation will be included in a letter to the licensee.

Environmental Impacts of the Alternatives to the Proposed Action

As an alternative to the proposed action, the staff considered denying the proposed action (*i.e.,* the ''no-action'' alternative). Denial of the license amendment request would result in no change in current environmental conditions at Indian Point.

Alternative Use of Resources

The proposed action would not involve the use of any resources.

Agencies and Persons Consulted

The staff did not consult with any Federal Agency or New York state agencies regarding the environmental impact of the proposed action.

III. Finding of No Significant Impact

The licensee has requested a license amendment to permit licensee security personnel, in the performance of official duties, to transfer, receive, possess, transport, import, and use certain firearms and large capacity ammunition feeding devices not previously permitted to be owned or possessed, notwithstanding State, local, and certain Federal firearms laws, or regulations that would otherwise prohibit such actions.

On the basis of the information presented in this environmental assessment, the NRC concludes that the proposed action would not cause any significant environmental impact and would not have a significant effect on the quality of the human environment. In addition, the NRC has determined that an environmental impact statement is not necessary for the evaluation of this proposed action.

Other than the licensee's letter dated August 20, 2013, there are no other environmental documents associated with this review. This document is available for public inspection as indicated above.

Dated at Rockville, Maryland, this 8th day of December 2015.

For the Nuclear Regulatory Commission.

Travis L. Tate,

Chief, Plant Licensing Branch I–1, Division of Operating Reactor Licensing, Office of Nuclear Reactor Regulation.

[FR Doc. 2015–31634 Filed 12–15–15; 8:45 am]

BILLING CODE 7590–01–P

POSTAL REGULATORY COMMISSION

[Docket Nos. PI2016–2; Order No. 2862]

Public Inquiry on Commission Jurisdiction Over Postal Service Determinations To Close or Consolidate Post Offices

AGENCY: Postal Regulatory Commission.

ACTION: Notice.

SUMMARY: The Commission is establishing a public inquiry to receive comments regarding the Commission's jurisdiction over Postal Service determinations to close or consolidate post offices. This notice informs the public of this proceeding, invites public comment, and takes other administrative steps.

DATES: *Comments are due:* January 29, 2016. *Reply Comments are due:* February 23, 2016.

ADDRESSES: Submit comments electronically via the Commission's Filing Online system at *http://www.prc.gov.* Those who cannot submit comments electronically should contact the person identified in the **FOR FURTHER INFORMATION CONTACT** section by telephone for advice on filing alternatives.

FOR FURTHER INFORMATION CONTACT: David A. Trissell, General Counsel, at 202–789–6820.

SUPPLEMENTARY INFORMATION:

I. Introduction

The Postal Regulatory Commission (Commission) seeks comments on the interpretation of terms related to 39 U.S.C. 404(d), which governs the jurisdiction of the Commission over Postal Service determinations to close or consolidate post offices. This statute sets forth requirements for the Postal Service to follow when it closes or consolidates a post office, and authorizes the Commission to review these closures and consolidations. Petitions filed before the Commission regarding the closing of various Postal Service retail facilities often indicate a misunderstanding among the general public of the scope of Commission authority to review Postal Service decisions regarding the operation of its retail facilities.

The Commission seeks input as to what, in commenters' views, constitutes a relocation or rearrangement of postal services and is thus exempt from Commission review pursuant to section 404(d); and when or if the Commission should have jurisdiction to review the closing or consolidation of a contract postal unit (CPU). The remainder of this Notice provides background information on the Commission precedent related to its jurisdiction to aid commenters.

In Order Nos. 1866 [1] and 2505 [2] the Commission signaled its intent to initiate this type of separate proceeding in which it could consider the scope of its appellate authority with regard to relocations and rearrangements of postal retail facilities, as well as the closure of CPUs. Specifically, in *Glenoaks*, the Commission expressed a preference to initiate a proceeding in which it would clarify and distinguish Postal Service characterizations of relocations and rearrangements from closures and consolidations. Order No. 1866 at 12. In *Careywood*, the Commission acknowledged the need to review the sole source standard that it has applied to CPUs. Order No. 2505 at 14. The Commission initiates this public inquiry to discuss the aforementioned matters and provide stakeholders and other interested persons an opportunity to provide written comments.

II. Public Inquiry

The Commission establishes Docket No. PI2016–2 to solicit comments regarding its interpretation of terms and concepts related to section 404(d) including the distinctions between closures or consolidations and relocations or rearrangements of postal retail facilities, and the interpretation and application of the sole source standard which provides for Commission jurisdiction over certain CPUs. Title 39 U.S.C. 404(d) sets forth the procedures the Postal Service shall follow when closing or consolidating a post office and delineates the Commission's prescribed authority to review these closures and consolidations. ''Closing'' refers to the elimination of a post office in a community,[3] while ''consolidation'' has not been defined by the Commission since the Postal Service updated its regulations in 2011 and changed its definition of ''consolidation.'' [4]

The Commission's limited authority to review post office closings and consolidations is provided by 39 U.S.C. 404(d)(5).[5] That section requires that the Commission review the Postal Service's determination on the basis of the record that is before the Postal Service. The Commission is empowered by section 404(d)(5) to set aside any determination or findings and conclusions that the Commission finds to be: (A) Arbitrary, capricious, an abuse of discretion, or otherwise not in accordance with the law; (B) without observance of procedure required by law; or (C) unsupported by substantial evidence in the record. Should the Commission set aside any such determination or findings and conclusions, it may remand the entire matter to the Postal Service for further consideration. Section 404(d)(5) does not, however, authorize the Commission to reject or modify the Postal Service's determination by substituting its judgment for that of the Postal Service.[6]

The Commission requests comments on whether its regulations in 39 CFR part 3025 and their application by the Commission in prior orders interpreting the statute and regulations are sufficiently clear.

A. Relocations and Rearrangements

The Commission has determined that when the Postal Service redeploys retail facilities within a community, such a change constitutes a relocation or rearrangement of postal retail services within a community, as opposed to a closing or a consolidation. A relocation or rearrangement is not subject to section 404(d) and therefore not within the Commission's jurisdiction. This interpretation of the definition of closing affords the Postal Service, as the operator and provider of service, the flexibility to organize and place its retail service outlets in the ways it sees best. Although the relocation of postal retail services is not defined by statute, the Postal Service defines and distinguishes

[1] Docket No. A2013–5, *Glenoaks Station Post Office, Burbank, California*, Order Affirming Determination, October 31, 2013 (Order No. 1866).

[2] Docket No. A2015–2, *Careywood Post Office, Careywood, Idaho,* Order Dismissing Appeal, May 27, 2015 (Order No. 2505).

[3] *See, e.g.,* Docket No. A86–13, *In the Matter of Wellfleet, Massachusetts 02667,* Order Dismissing Docket No. A86–13, June 10, 1986 (Order No. 696).

[4] In the 2011 update, the Postal Service defined ''consolidation'' as a conversion from a Postal Service-operated retail facility to a contractor-operated retail facility that reports to a Postal Service-operated retail facility. *See* 39 CFR 241.3(a)(2)(iv). Previously, the Postal Service had defined ''consolidation'' as the act of subordinating day-to-day overall management of one office with a postmaster to the administrative personnel of another office. *See Knapp* v. *U.S. Postal Service,* 449 F.Supp. 158 (E.D. Mich. 1978) (*Knapp*).

[5] The word ''appeal'' in the statute is somewhat imprecise, as the Commission does not have the authority to reverse or undo the Postal Service's action. If the Commission remands the Postal Service's determination, the Postal Service's regulations require that any deficiencies identified by the Commission be corrected before closing the facility. *See* 39 CFR 241.3(g)(4(ii).

[6] However, section 404(d)(5) does authorize the Commission to suspend the effectiveness of a Postal Service determination pending disposition of the appeal.

it from facility discontinuances and consolidations. *See* 39 CFR 241.4.

Generally speaking, relocation involves the moving of retail services from one station or branch to another postal facility within the same community. *Id.* The Commission has concluded that a Postal Service action affecting a postal retail facility constitutes a relocation and falls outside the scope of 39 U.S.C. 404(d) if both the existing site and the proposed site of the retail facility are located in the same community.[7] This view is consistent with the Commission's predecessor, the Postal Rate Commission's ruling in *Oceana,* where it held that when enacting section 404(b),[8] Congress did not intend for the procedures and appeal right to apply to the specific building housing the post office, but rather Congress was concerned with the provision of a facility within the community. Order No. 436 at 1. The Commission has determined that Postal Service decisions to relocate retail facilities within the same community are not closings or consolidations and, therefore, fall outside the scope of the Commission's jurisdiction under 39 U.S.C. 404(d). *See* Order No. 436.

The Commission has applied this rationale in several post office closing appeals and found that transfers of retail operations constituted relocations over which it lacked section 404(d) jurisdiction to review. For example, in *Venice,* the Commission dismissed an appeal of a Postal Service decision to transfer retail operations to a carrier annex approximately 400 feet away as a relocation falling outside the scope of 39 U.S.C. 404(d).[9] In *Santa Monica* and *Ukiah,* the Commission determined that the transfer of retail operations to a carrier annex approximately 1 mile away from the main post office constituted a relocation of retail services falling outside the scope of 39 U.S.C. 404(d).[10] Similarly, in *Wellfleet,* the Postal Rate Commission determined that moving retail operations to a new location 1.2 miles away was a relocation and 39 U.S.C. 404(d) did not apply. *See* Order No. 696.

The Commission also has determined that section 404(d) does not apply to Postal Service actions that rearrange retail services within a community. In *Oceana,* the Postal Rate Commission determined that the Postal Service decision to close the Oceana Station was part of an overall plan to rearrange postal retail and delivery operations within the Virginia Beach community and section 404(d) did not apply. The plan included building a new post office within Virginia Beach approximately 4 miles away from the site of Oceana Station, reorganizing carrier operations, improving retail services, and opening a CPU. Order No. 436 at 4–5.

The Commission has consistently applied its rationale used in *Oceana* and dismissed several post office closing appeals on the grounds that the Postal Service action constituted a rearrangement of retail facilities within a community. In *Sundance,* the Commission held the transfer of postal retail operations to a postal facility within the same community was a rearrangement of retail facilities and not subject to 39 U.S.C. 404(d).[11]

Currently, the Postal Service's regulations regarding the relocation of postal facilities within a community can be found in 39 CFR part 241—Establishment, Classification, and Discontinuance; expansion, relocation, and construction of post offices, and was most recently revised February 20, 2015, and became effective March 23, 2015.[12] However, Commission regulations do not specifically address relocations or rearrangements and, in light of previous Commission orders, it is interested in receiving comments regarding this issue.[13]

B. Sole Source

CPUs and Community Post Offices (CPOs) are types of contractor-operated (as opposed to Postal Service-operated) facilities. *See* 39 CFR 241.3(a)(2)(ii). A CPU is a contract station, contract branch, or CPO operated under contract by persons who are not postal employees in a space provided by the contractor.[14] Village Post Offices (VPOs), although operated under a contract, are not classified by the Postal Service as a CPU.[15] While CPUs generally do not fall within the scope of 39 U.S.C. 404(d), in select circumstances when the Commission determines that a CPU is the sole source of postal retail services to a community, it has found that section 404(d) (both the statutory intent and language) justifies the Commission exercise of review authority over sole source CPU closures and consolidations.[16]

A CPO is a contractor-operated facility that provides services in small communities where an independent post office has been discontinued; a CPO bears its community's name and ZIP Code as part of a recognized mailing address. POM section 123.126, *see also* Glossary of Postal Terms.

In *Knob Fork,* the Commission first established the sole source exception, applying 39 U.S.C. 404(b) to a CPU[17] closure when that facility was the sole source of retail postal services to a community. *Knob Fork* at 10. In *Knob Fork,* the Postal Service emphasized that the main difference between a CPO and an independent post office was the employment status of the facility operator. *Id.* at 6. The Commission noted that if it accepts the Postal Service's statement that a CPO serves the public in the same way as a post office, it is reasonable to apply the section 404(b) procedures whenever the Postal Service proposes to close or consolidate a community's retail postal facility. *Id.* at 7. The Commission found that applying the section 404(b) closing procedures, given the Postal Service's definition of a CPO as the sole postal retail source serving a community, is consistent with Congress's intent that section 404(b) apply to the closing of the

[7] *See* Docket No. A82–10, *Oceana Station, Virginia Beach, Virginia,* Order Dismissing Docket No. A82–10, June 25, 1982, at 7 (Order No. 436).

[8] Section 404(b) of title 39 was renumbered to section 404(d) with the enactment of the Postal Accountability and Enhancement Act, Public Law 109–435, December 20, 2006.

[9] Docket No. A2012–17, *Venice Post Office, Venice, California,* Order Dismissing Appeal, January 24, 2012 (Order No. 1166).

[10] Docket A2013–1, *Santa Monica Post Office, Santa Monica, California,* Order Granting Motion to Dismiss, December 19, 2012 (Order No. 1588); Docket No. A2011–21, *Ukiah Main Post Office, Ukiah, California,* Order Granting Motion to Dismiss, August 15, 2011 (Order No. 804).

[11] Docket No. A2010–2, *Sundance Post Office, Steamboat Springs, Colorado,* Order Dismissing Appeal, April 27, 2010 (Order No. 448).

[12] 80 FR 9190 (Feb. 20, 2015).

[13] Previously the Commission deferred consideration of a definition of the term ''relocation.'' *See* Order No. 1171, Docket No. RM2011–13, Order Adopting Final Rules Regarding Appeals of Postal Service Determinations to Close or Consolidate Post Offices, January 25, 2012, at 8.

[14] Postal Operations Manual section 123.126, Issue 9, July 2002, Updated With Postal Bulletin Revisions Through October 31, 2013 (POM); *see also,* Publication 32—Glossary of Postal Terms, July 2013, *https://about.usps.com/publications/pub32/* (Glossary of Postal Terms), defining a CPU as a ''postal unit that is a subordinate unit within the service area of a main Post Office. It is usually located in a store or place of business and is operated by a contractor who accepts mail from the public, sells postage and supplies, and provides selected Special Services (*e.g.,* Postal Money Order or Registered Mail). Also called contract branch, contract station, and community Post Office unit.''

[15] *See* Village Post Offices Fact Sheet, July 2011, *https://about.usps.com/news/electronic-press-kits/expandedaccess/assets/pdf/vpo-fact-sheet-110726.pdf.* VPOs, like CPUs and CPOs, are part of the Postal Service's ''Approved Postal Provider'' network and are retail outlets for postal products and services operated by a third party.

[16] *See* Docket No. A83–30, *In the Matter of Knob Fork, West Virginia 26579,* Commission Opinion Remanding Determination for Further Consideration 39 U.S.C. 404(b)(5), January 18, 1984, at 7 *(Knob Fork).*

[17] The specific type of CPU at issue in *Knob Fork* was a CPO.

sole postal retail facility serving a community. *Id.* at 8.

In *Green Mountain,* the Commission reiterated that section 404(b) applies to sole source CPOs:

It is the view of the Commission that Congress expected the section 404(b) procedures to apply not only to independent post offices, as defined by the Postal Service, but also Community Post Offices when they are the sole source of postal services to a community. The Postal Service's consistent position is that the service of a Community Post Office is equivalent to that of an independent post office it seeks to consolidate. Therefore, the most reasonable reading of section 404(b) and Congressional intent is that 404(b) must apply whenever there is a proposed closure or consolidation of a community's sole retail postal facility, including a Community Post Office.[18]

Over the last 30 years, when determining whether a CPU is the sole source of postal retail services in a community, the Commission has considered other sources of retail postal services to the community at issue. For example, in *Alplaus,* since there was a post office located approximately 1 mile from the Alplaus CPO and there were over 20 alternate access locations within a 5-mile radius, the Commission concluded that the Alplaus CPO was not the ''sole source'' of postal services for the community.[19] Accordingly, the Commission determined that since the Alplaus CPO was not the sole source of postal services for the community, section 404(d) did not apply.

Similarly, in the past 3 decades since the sole source standard was set forth in *Knob Fork,* there have been advancements in technology, creation and expansion of commercial business centers, evolution of the postal retail network, and different modes of transportation. The Commission has continued to apply the sole source framework using a reasonable standard based on the statute and legislative intent. The sole source standard is not based simply on whether a facility is the only postal retail service facility located in a community. The standard is whether that retail facility is the sole provider of services to a community. This standard allows the Commission to recognize ongoing developments in travel, communication, and other services that may impact a community in how it receives its postal services.

In *Careywood,* the most recent Commission decision to apply the sole source standard, the Commission recognized that approved shippers, contract units such as VPOs, and automated postal centers may not be currently available. However, it acknowledged that other categories of postal services, such as another postal retail facility approximately a 7-minute drive away, rural carriers, *https://www.usps.com,* and the Internet are available. Order No. 2505 at 12. The Commission noted that a facility that decades previously may have been considered the sole source may no longer be the sole source in part due to improved road safety, provisions of services by alternate means, and migration of business services to different areas. *Id.* The Commission also referenced Congress's requirement in section 302 of the Postal Accountability and Enhancement Act of 2006, that the Postal Service develop a plan for the expansion of access to alternate retail services including the Internet and non-post office access channels. *Id.* The Commission also held that while the Careywood CPU was the only physical postal retail provider in the community, it was not the community's only source for postal retail services, therefore section 404(d) did not apply. *Id.* at 13. The Commission explained that the closure of the Careywood CPU did not eliminate the Careywood community's access to postal retail services. *Id.*

The Commission requests comments on the issue of the sole source standard used to determine whether section 404(d) applies to the closure or consolidation of a CPU.

III. Conclusion

The Commission invites public comment on the Commission's interpretation of the language and intent of 39 U.S.C 404(d) with regards to the relocation and rearrangement of postal retail facilities, and the criteria and application of a sole source standard to CPU closures and consolidations. Additional information may be accessed via the Commission's Web site at *http://www.prc.gov.* Interested persons may submit comments no later than January 29, 2016. Reply comments may be filed no later than February 23, 2016.

IV. Public Representative

Pursuant to 39 U.S.C. 505, Lauren A. D'Agostino is designated as an officer of the Commission (Public Representative) to represent the interests of the general public in this proceeding.

V. Ordering Paragraphs

It is ordered:

1. The Commission hereby establishes Docket No. PI2016–2 to review issues related to the scope of its appellate authority over relocations and rearrangements of postal retail facilities and the closure or consolidation of CPUs.

2. Interested persons may submit comments no later than January 29, 2016.

3. Reply comments may be filed no later than February 23, 2016.

4. Pursuant to 39 U.S.C. 505, the Commission appoints Lauren A. D'Agostino to serve as an officer of the Commission (Public Representative) to represent the interests of the general public in this docket.

5. The Secretary shall arrange for publication of this notice in the **Federal Register**.

By the Commission.

Stacy L. Ruble,

Secretary.

[FR Doc. 2015–31572 Filed 12–15–15; 8:45 am]

BILLING CODE 7710–FW–P

[18] Docket No. A94–9, *In the Matter of Green Mountain, Iowa* 50637, Commission Opinion Affirming Decision Under 39 U.S.C. 404(b), August 16, 1994, at 5 (*Green Mountain*).

[19] Docket No. A2012–88, *Alplaus Post Office, Alplaus, New York,* Order Dismissing Appeal, March 21, 2012, at 6 (Order No. 1293).

SECURITIES AND EXCHANGE COMMISSION

[Release No. 34–76613; File No. SR–NYSEMKT–2015–89]

Self-Regulatory Organizations; NYSE MKT LLC; Notice of Filing of Proposed Rule Change to Its Rules To Provide That the Co-Location Services Offered by the Exchange Include Three Time Feeds and Four Bundles of Co-Location Services

December 10, 2015.

Pursuant to Section 19(b)(1) [1] of the Securities Exchange Act of 1934 (the ''Act'') [2] and Rule 19b–4 thereunder,[3] notice is hereby given that, on November 27, 2015, NYSE MKT LLC (the ''Exchange'' or ''NYSE MKT'') filed with the Securities and Exchange Commission (the ''Commission'') the proposed rule change as described in Items I and II below, which Items have been prepared by the self-regulatory organization. The Commission is publishing this notice to solicit comments on the proposed rule change from interested persons.

[1] 15 U.S.C.78s(b)(1).

[2] 15 U.S.C. 78a.

[3] 17 CFR 240.19b–4.

I. Self-Regulatory Organization's Statement of the Terms of the Substance of the Proposed Rule Change

The Exchange proposes to change its rules to provide that the co-location services offered by the Exchange include three time feeds and four bundles of co-location services (''Partial Cabinet Solution bundles''). The Exchange proposes to amend the NYSE MKT Equities Price List (''Price List'') and the NYSE Amex Options Fee Schedule (''Fee Schedule'') to reflect the time feeds and the Partial Cabinet Solution bundles. The text of the proposed rule change is available on the Exchange's Web site at *www.nyse.com,* at the principal office of the Exchange, and at the Commission's Public Reference Room.

II. Self-Regulatory Organization's Statement of the Purpose of, and Statutory Basis for, the Proposed Rule Change

In its filing with the Commission, the self-regulatory organization included statements concerning the purpose of, and basis for, the proposed rule change and discussed any comments it received on the proposed rule change. The text of those statements may be examined at the places specified in Item IV below. The Exchange has prepared summaries, set forth in sections A, B, and C below, of the most significant parts of such statements.

A. Self-Regulatory Organization's Statement of the Purpose of, and Statutory Basis for, the Proposed Rule Change

1. Purpose

The Exchange proposes to change its rules to provide that the co-location [4] services offered by the Exchange include three time feeds and four new Partial Cabinet Solution bundles. In addition, the Exchange proposes to amend the Price List and Fee Schedule to reflect the time feeds and the Partial Cabinet Solution bundles. The Exchange proposes to offer the Partial Cabinet Solution bundles beginning January 1, 2016.

Time Feeds

The proposed rule change would provide that Users [5] may purchase access to three time feeds, each of which provides a feed with the current time of day using one of three different time protocols: GPS Time Source, the Network Time Protocol feed (''NTP''), and Precision Timing Protocol (''PTP'').[6]

Time feeds are used to receive time and to synchronize clocks between computer systems or throughout a computer network. A User may opt to connect to a time feed for various reasons, including record keeping or measuring response times.[7] The proposed connectivity to time feeds would provide Users a convenient way to access time protocols.

The proposed change includes three time feeds. Global Positioning System (''GPS'') is a time and location system maintained by the United States government. The Exchange accesses the GPS Time Source feed through dedicated equipment and subscribing Users connect to the feed over dedicated cables. For the NTP and PTP time feeds, the Exchange routes the GPS data through dedicated equipment that reformats the GPS data into NTP and PTP.[8] Subscribing Users connect to PTP over dedicated cables and NTP over the Liquidity Center Network (''LCN''), a local area network available in the data center.

Currently, the Exchange's co-location services allow a User to request a physical cabinet to house its servers and other equipment in the data center. A User has the option of receiving an entire cabinet that is dedicated solely to that User (''dedicated cabinet'') or a partial cabinet available in increments of eight-rack units of space (''partial cabinet'').[9] Connectivity to all three time protocols would be available for dedicated cabinets. Due to technical limitations, connectivity to the NTP and PTP would be available for partial cabinets, but connectivity to GPS would not.[10]

The Exchange proposes to amend its Price List and the Fee Schedule to reflect fees related to these services, as follows:

Connection to time protocol feed	Network time protocol feed (Note: LCN only)	$300 initial charge plus $100 monthly.
	Precision Time Protocol	$1,000 initial charge plus $250 monthly.
	GPS Time Source (Note: Dedicated cabinets only).	$3,000 initial charge plus $400 monthly.

[4] The Exchange initially filed rule changes relating to its co-location services with the Securities and Exchange Commission (''Commission'') in 2010. *See* Securities Exchange Act Release No. 63275 (November 8, 2010), 75 FR 70048 (November 16, 2010) (SR–NYSEArca–2010–100) (the ''Original Co-location Filing''). The Exchange operates a data center in Mahwah, New Jersey (the ''data center'') from which it provides co-location services to Users.

[5] For purposes of the Exchange's co-location services, a ''User'' means any market participant that requests to receive co-location services directly from the Exchange, a ''Hosting User'' means a User that hosts a Hosted Customer in the User's co-location space, and a ''Hosted Customer'' means a customer of a Hosting User that is hosted in a Hosting User's co-location space. *See* Securities Exchange Act Release No. 76010 (September 29, 2015), 80 FR 60197 (October 5, 2015) (SR–NYSEArca–2015–82). As specified in the Fee Schedules, a User that incurs co-location fees for a particular co-location service pursuant thereto would not be subject to co-location fees for the same co-location service charged by the Exchange's affiliates New York Stock Exchange LLC and NYSE MKT LLC. *See* Securities Exchange Act Release No. 70173 (August 13, 2013), 78 FR 50459 (August 19, 2013) (SR–NYSEArca–2013–80).

[6] The time feeds are unrelated to trading on the Exchange or the Exchange's data feeds. A User does not require connectivity to a time feed to trade on the Exchange, and usage of a time feed has no effect on a User's orders going to, or trade data coming from, the Exchange.

[7] For example, a User may connect to a time feed for record keeping purposes if it uses that specific time protocol for all its activities, both inside and out of the data center.

[8] The reformatting equipment is programmed by the vendor to generate NTP and PTP time feeds that comply with industry standards. The Exchange does not program or manage the reformatting of the GPS data into NTP and PTP.

[9] *See* Original Co-location Filing, at 70049 and Securities Exchange Act Release No. 71130 (December 18, 2013), 78 FR 77765 (December 24, 2013) (SR–NYSEArca–2013–143) (notice of filing and immediate effectiveness of proposed rule change to offer partial cabinets).

[10] The Exchange does not propose to make connectivity to GPS available for partial cabinets because the proximity of the GPS and power connections into a partial cabinet would expose GPS to interference from the cable power connections, interfering with the delivery of the GPS data.

[11] The Exchange believes that the 12-month minimum period is common practice for colocation offerings. *See, e.g.,* Securities Exchange Act Release No. 68735 (January 25, 2013), 78 FR 6842 (January 31, 2013) (SR–NASDAQ–2012–119) (noting that NASDAQ represented that the lock-in feature ''is common practice for colocation offerings''). If a User upgrades a service (*i.e.,* goes from a 10 Gb to a 40 Gb LCN circuit), it will not be held to the minimum period for the first service, but will be subject to a 12-month minimum period for the upgraded service, starting from the date of the upgrade.

Users that order the proposed time feed services will be subject to a 12-month minimum commitment, after which period they are subject to a 60-day rolling time period.[11]

Partial Cabinet Solution Bundles

The Exchange proposes to offer four Partial Cabinet Solution bundles intended to make it more cost effective for smaller Users to utilize co-location. These proposed Partial Cabinet Solution bundles would provide smaller Users a convenient way to create a colocation environment, by including in each Partial Cabinet Solution bundle cabinet space, network access, fiber connections (''cross connects''), and the choice of either the NTP or PTP time feed. The Exchange expects that such Users would include those with minimal power or cabinet space demands and Users for which the costs attendant with having a dedicated cabinet or greater network connection bandwidth are too burdensome. The Exchange expects that the majority of Users that purchase a Partial Cabinet Solution bundle will not previously have been a User or Hosted Customer, but recognizes that it is possible that purchasing Users may include entities that otherwise would be Hosted Customers. The Exchange proposes to offer the Partial Cabinet Solution bundles beginning January 1, 2016.

As noted above, currently a User may opt to receive a partial cabinet available in increments of eight-rack units of space. Each partial cabinet is allocated up to two kilowatts (''kWs'') of power.

In addition, the Exchange offers Users access to two local area networks available in the data center: The LCN and the internet protocol (''IP'') network.[12] The Exchange offers 1 and 10 gigabit (''Gb'') IP network access, 1, 10, and 40 Gb LCN network access, and LCN 10 Gb LX network access.[13]

Users may use cross connects to connect cabinets within the data center, including between a User's cabinet and a non-User's equipment within the data center. For example, a User may utilize a cross connect with a non-User to connect to a carrier's equipment in order to access the carrier's network outside the data center.[14]

The Exchange proposes to offer four Partial Cabinet Solution bundles. Because the Partial Cabinet Solution bundles are intended to make it more cost effective for smaller Users to utilize co-location, the Exchange proposes only to provide access to a Partial Cabinet Solution bundle to a User that meets the following conditions: (1) The User purchases only one Partial Cabinet Solution bundle; (2) the User and its Affiliates [15] do not currently have a Partial Cabinet Solution bundle; and (3) after the purchase of the Partial Cabinet Solution bundle, the User, together with its Affiliates, will have an aggregate cabinet footprint of no more than 2 kW.[16] A User's aggregate cabinet footprint is the total kW of its cabinets, including both partial and dedicated cabinets, and a Hosted Customer's aggregate cabinet footprint is the total kW of the portion of the Hosting User's cabinet, whether partial or dedicated, allocated to such Hosted Customer.[17]

The Exchange proposes to aggregate the aggregate cabinet footprint of a User of a Partial Cabinet Solution bundle with the aggregate cabinet footprint of its Affiliates for purposes of determining whether the User has satisfied the conditions in order to avoid disparate treatment of Users that have divided their various business activities between separate corporate entities, including between a User and a Hosted Customer, as compared to Users that operate those business activities within a single corporate entity. Accordingly, the Exchange proposes that a User requesting a Partial Cabinet Solution bundle be required to represent to the Exchange (a) whether it has any Affiliates that are Users or Hosted Customers, and (b) that its aggregate cabinet footprint, together with the aggregate cabinet footprint of its Affiliates that are also Users or Hosted Customers and the cabinet footprint of the Partial Cabinet Solution bundle, will not exceed 2 kW. In addition, the User of a Partial Cabinet Solution bundle would be required to inform the Exchange immediately of any event that causes another User or Hosted Customer to become an Affiliate.[18] The Exchange proposes to revise the Price List and Fee Schedule accordingly.

If a User of a Partial Cabinet Solution bundle became Affiliated with one or more other Users or Hosted Customers and thereby no longer met the conditions for access to the Partial Cabinet Solution bundle, or if the User otherwise ceased to meet the conditions for access, the Exchange would no longer offer access to the Partial Cabinet Solution bundle to such User. Once the User ceased to meet the conditions for access to the Partial Cabinet Solution bundle, it would be charged for each of the services individually, at the price for each such service set out in the Price List and Fee Schedule. Such price change would be effective as of the date that the User ceased to meet the conditions.

The Exchange proposes that Users that purchase a Partial Cabinet Solution bundle would be charged a non-recurring initial charge (''NRC'') and a monthly recurring charge (''MRC'').[19]

[11] The Exchange believes that the 12-month minimum period is common practice for colocation offerings. *See, e.g.,* Securities Exchange Act Release No. 68735 (January 25, 2013), 78 FR 6842 (January 31, 2013) (SR–NASDAQ–2012–119) (noting that NASDAQ represented that the lock-in feature ''is common practice for colocation offerings''). If a User upgrades a service (*i.e.,* goes from a 10 Gb to a 40 Gb LCN circuit), it will not be held to the minimum period for the first service, but will be subject to a 12-month minimum period for the upgraded service, starting from the date of the upgrade.

[12] *See* Original Co-location Filing, at 70049 and Securities Exchange Act Release Nos. 74219 (February 6, 2015), 80 FR 7899 (February 12, 2015) (SR–NYSEArca–2015–03) (notice of filing and immediate effectiveness of proposed rule change to include IP network connections and fiber cross connects between a User's cabinet and a non-User's equipment) (''Release No. 74219'') and 70887 (November 15, 2013), 78 FR 69897 (November 21, 2013) (SR–NYSEArca–2013–123) (notice of filing and immediate effectiveness of proposed rule change to include LCN 10 Gb LX connection).

[13] The Exchange also proposes to provide 40 Gb IP network access. The 40 Gb IP network connection is expected to be available no later than April 15, 2016. The Exchange will announce the date that the 40 Gb IP network connection will be available through a customer notice. *See* Securities Exchange Act Release No. 76372 (November 5, 2015), 80 FR 70039 (November 12, 2015) (SR–NYSEArca–2015–105) (notice of filing and immediate effectiveness of proposed rule change to include IP 40 Gb network connections).

[14] *See* Release No. 74219, *supra* note 12.

[15] For purposes of the Partial Cabinet Solution bundles, an ''Affiliate'' of a User would be any other User or a Hosted Customer that is under 50% or greater common ownership or control of the first User.

[16] For example, a User with a 4 kW dedicated cabinet would not be eligible for a Partial Cabinet Solution bundle, as its aggregate cabinet footprint would be either 5 kW or 6 kW once a Partial Cabinet Solution bundle was added.

[17] The Exchange's subsidiary NYSE Arca Equities similarly aggregates eligible activity of member organization affiliates for purposes of charges or credits based on volume. *See* Securities Exchange Act Release No. 74604 (March 30, 2015), 80 FR 18270 (April 3, 2015) (SR–NYSEArca–2015–20), 80 FR 20043 (April 14, 2015) (correction). The threshold percentage used in the definition of ''affiliate'' for purposes of charges or credits based on volume is 75%. *Id.* The Exchange proposes a lower threshold in the present case in order to discourage any User from taking deliberate advantage of the proposed Partial Cabinet Solution bundle by setting up separate corporate entities to act as Users or Hosted Customers.

[18] The Exchange would review available information regarding the entities and may request additional information to verify the Affiliate status of a User or Hosted Customer. The Exchange would approve a request for a Partial Cabinet Solution bundle unless it determines that the certification is not accurate.

[19] A User that changes its Partial Cabinet Solution bundle would not be subject to a second NRC. Rather, it would pay the difference, if any, between the NRCs. For example, a User that buys an Option A Partial Cabinet Solution bundle would pay a $7,500 NRC. If it then opted to change to Option C, it would pay $2,500, *i.e.* the difference between the Option A and Option C NRCs of $7,500 and $10,000, respectively.

The Exchange proposes that Users that order a Partial Cabinet Solution bundle on or before December 31, 2016 would have their MRC reduced by 50% for the first 12 months.

The Exchange proposes to amend its Price List and Fee Schedule to reflect fees related to these new services, as follows:

Type of service	Description	Amount of charge
Partial Cabinet Solution bundles (effective from January 1, 2016). Note: A User and its Affiliates are limited to one Partial Cabinet Solution bundle at a time. A User and its Affiliates must have an aggregate cabinet footprint of 2 kW or less to qualify for a Partial Cabinet Solution bundle.	Option A: 1 kW partial cabinet, 1 LCN connection (1 Gb), 1 IP network connection (1 Gb), 2 fiber cross connections and either the Network Time Protocol Feed or Precision Timing Protocol.	$7,500 initial charge per bundle plus monthly charge per bundle as follows: • For Users that order on or before December 31, 2016: $3,000 monthly for first 12 months of service, and $6,000 monthly thereafter. • For Users that order after December 31, 2016: $6,000 monthly.
	Option B: 2 kW partial cabinet, 1 LCN connection (1 Gb), 1 IP network connection (1 Gb), 2 fiber cross connections and either the Network Time Protocol Feed or Precision Timing Protocol.	$7,500 initial charge per bundle plus monthly charge per bundle as follows: • For Users that order on or before December 31, 2016: $3,500 monthly for first 12 months of service, and $7,000 monthly thereafter. • For Users that order after December 31, 2016: $7,000 monthly.
	Option C: 1 kW partial cabinet, 1 LCN connection (10 Gb), 1 IP network connection (10 Gb), 2 fiber cross connections and either the Network Time Protocol Feed or Precision Timing Protocol.	$10,000 initial charge per bundle plus monthly charge per bundle as follows: • For Users that order on or before December 31, 2016: $7,000 monthly for first 12 months of service, and $14,000 monthly thereafter. • For Users that order after December 31, 2016: $14,000 monthly.
	Option D: 2 kW partial cabinet, 1 LCN connection (10 Gb), 1 IP network connection (10 Gb), 2 fiber cross connections and either the Network Time Protocol Feed or Precision Timing Protocol.	$10,000 initial charge per bundle plus monthly charge per bundle as follows: • For Users that order on or before December 31, 2016: $7,500 monthly for first 12 months of service, and $15,000 monthly thereafter. • For Users that order after December 31, 2016: $15,000 monthly.

Each proposed Partial Cabinet Solution bundle is made up of a number of different services. If a User purchased each of the components of a Partial Cabinet Solution bundle, whether over several purchases or in one order, and met the conditions described above for access to the Partial Cabinet Solution bundle, the Exchange would automatically treat the User's services as a Partial Cabinet Solution bundle and, effective the date of installation of the final component, reduce the User's MRC to the MRC for the relevant bundle.[20]

Finally, the Exchange proposes to make non-substantive changes to the Price List and Fee Schedule to add subheadings under ''Co-Location Fees'' for ''Definitions'' and ''General Notes''. Definitions of aggregate cabinet footprint and Affiliate would be added under ''Definitions''. The existing note stating that a User that incurs co-location fees for a particular co-location service would not be subject to co-location fees for the same co-location service charged by the Exchange's affiliates would become note one under ''General Notes'' and the proposed provisions regarding aggregate cabinet footprints and what portion of an NRC, if any, a User would be subject to if it changed bundles would become note two.[21]

Users that purchase a proposed Partial Cabinet Solution bundle would not be subject to the 12-month minimum commitment, but rather would be subject to a 90-day commitment, after which period they would be subject to the 60-day rolling time period. As noted above, the Exchange anticipates that Users of the Partial Cabinet Solution bundles would include those with minimum power or cabinet space demands and Users for which the costs attendant with having a dedicated cabinet or greater network connection bandwidth are too burdensome. The Exchange proposes to have a reduced minimum commitment period for the Partial Cabinet Solution bundle to further reduce the cost commitment for such Users.

General

As is the case with all Exchange co-location arrangements, (i) neither a User nor any of the User's customers would be permitted to submit orders directly to the Exchange unless such User or customer is a member organization, a Sponsored Participant or an agent thereof (*e.g.,* a service bureau providing order entry services); (ii) use of the co-location services proposed herein would be completely voluntary and available to all Users on a non-discriminatory basis; [22] and (iii) a User would only

[20] The Exchange proposes to implement the proposed Partial Cabinet Solution bundle changes effective January 1, 2016. If as of that date a User already had each of the components of a Partial Cabinet Solution bundle and met the conditions described above for access to the Partial Cabinet Solution bundle, the Exchange would automatically treat the User's services as a Partial Cabinet Solution bundle and reduce the User's MRC to the MRC for the relevant bundle, effective January 1, 2016.

[21] *See* note 18, *supra.*

[22] As is currently the case, Users that receive co-location services from the Exchange will not receive any means of access to the Exchange's trading and execution systems that is separate from, or superior to, that of other Users. In this regard, all orders sent to the Exchange enter the Exchange's trading and execution systems through the same order gateway, regardless of whether the sender is co-located in the data center or not. In addition, co-located Users do not receive any market data or data service product that is not available to all Users, although Users that

Continued

incur one charge for the particular co-location service described herein, regardless of whether the User connects only to the Exchange or to the Exchange and one or both of its affiliates.[23]

The proposed change is not otherwise intended to address any other issues relating to co-location services and/or related fees, and the Exchange is not aware of any problems.

2. Statutory Basis

The Exchange believes that the proposed rule change is consistent with Section 6(b) of the Act,[24] in general, and furthers the objectives of Sections 6(b)(5) of the Act,[25] in particular, because it is designed to prevent fraudulent and manipulative acts and practices, to promote just and equitable principles of trade, to foster cooperation and coordination with persons engaged in regulating, clearing, settling, processing information with respect to, and facilitating transactions in securities, to remove impediments to, and perfect the mechanisms of, a free and open market and a national market system and, in general, to protect investors and the public interest and because it is not designed to permit unfair discrimination between customers, issuers, brokers, or dealers. The Exchange believes that providing connectivity to time feeds is not designed to permit unfair discrimination between customers, issuers, brokers, or dealers because the service would offer connectivity to different time feed options, allowing a User that opts to connect to a time feed to select the time protocol that best suits its needs, helping it tailor its data center operations to the requirements of its business operations. The time feeds are unrelated to trading on the Exchange or the Exchange's data feeds. A User does not require connectivity to a time feed to trade on the Exchange, and usage of a time feed has no effect on a User's orders going to, or trade data coming from, the Exchange.

The Exchange believes that providing connectivity to GPS for dedicated cabinets but not partial cabinets and to NTP through the LCN but not the IP network is not designed to permit unfair discrimination between customers, issuers, brokers, or dealers because the Exchange proposes to offer connectivity to time feeds, including GPS and NTP, as a convenience to Users, and usage of a time feed has no effect on a User's orders going to, or trade data coming from, the Exchange. Regarding GPS, the proximity of GPS and power connections into a partial cabinet would expose GPS to interference from the cable power connections, interfering with the delivery of the GPS data, and so the Exchange is not able to offer connectivity to GPS for partial cabinets. A User that requires connectivity to GPS could opt to purchase a dedicated cabinet or become a Hosted Customer of a Hosting User with a dedicated cabinet. Regarding NTP, the Exchange has opted to offer the NTP only over the LCN due to a lack of demand for the NTP over the IP network. A User that requires connectivity to NTP could connect to the LCN.

The Exchange believes that the Partial Cabinet Solution bundles are not designed to permit unfair discrimination between customers, issuers, brokers, or dealers because the Partial Cabinet Solution bundles would offer four different Partial Cabinet Solution bundles with options with respect to cabinet footprint and network connections. Users that require other sizes or combinations of cabinets, network connections and cross connects could still request them.

The Exchange believes that its proposal would remove impediments to, and perfects the mechanisms of, a free and open market and a national market system and, in general, protects investors and the public interest because the proposed connectivity to time feeds would provide Users a convenient way to access time protocols. Having different time feed options would allow a User with a dedicated cabinet to select the time protocol that suits its needs, and for a User with a partial cabinet to select between the NTP and PTP.

In addition, the Exchange believes that its proposal would remove impediments to, and perfects the mechanisms of, a free and open market and a national market system and, in general, protects investors and the public interest because the proposed Partial Cabinet Solution bundles would make it more cost effective for Users that meet the conditions described above for access to the Partial Cabinet Solution bundle to utilize co-location by creating a convenient way to create a colocation environment, through four Partial Cabinet Solution bundles with options with respect to cabinet footprint and network connections. The Exchange expects that such Users would include those with minimal power or cabinet space demands and Users for which the costs attendant with having a dedicated cabinet or greater network connection bandwidth are too burdensome. Such Users may choose to pass on such cost savings to their customers. The Exchange expects that the majority of Users that purchase a Partial Cabinet Solution bundle will not previously have been a User or Hosted Customer, but recognizes that it is possible that purchasing Users may include entities that otherwise would be Hosted Customers.

The Exchange also believes that the proposed rule change is consistent with Section 6(b)(4) of the Act,[26] in particular, because it provides for the equitable allocation of reasonable dues, fees, and other charges among its member organizations, issuers and other persons using its facilities and does not unfairly discriminate between customers, issuers, brokers or dealers.

Overall, the Exchange believes that the proposed fees for the time feed connectivity and Partial Cabinet Solution bundles are reasonable because the Exchange proposes to offer the services as a convenience to Users, but in doing so will incur certain costs, including costs related to the data center facility, hardware and equipment and costs related to personnel required for initial installation and monitoring, support and maintenance of such services. The higher fee in connection with the GPS reflects the greater costs for its equipment, installation and maintenance in comparison with the other time feeds. The Exchange believes that submitting Users that order the proposed time feed services to a 12-month minimum commitment, after which period they would be subject a 60-day rolling time period, is reasonable, as it reflects the investment the Exchange incurs in order to provide the service. The Exchange believes that the 12-month minimum period is common practice for colocation offerings.

In addition, the Exchange believes that its proposal to limit access to Partial Cabinet Solution bundles to a User that meets the conditions described above, specifically, that (1) the User purchases only one Partial Cabinet Solution bundle, (2) the User and its Affiliates do not currently have a Partial Cabinet Solution bundle, and, (3) after the purchase of a Partial Cabinet Solution bundle, the User, together with its Affiliates, will have an aggregate cabinet footprint of no more than 2 kW, is reasonable, because the

receive co-location services normally would expect reduced latencies in sending orders to, and receiving market data from, the Exchange.

[23] *See* SR–NYSEMKT–2013–67, *supra* note 5 at 50471. The Exchange's affiliates have also submitted the same proposed rule change to propose the changes described herein. *See* SR–NYSE–2015–53 and SR–NYSEArca–2015–102.

[24] 15 U.S.C. 78f(b).

[25] 15 U.S.C. 78f(b)(5).

[26] 15 U.S.C. 78f(b)(4).

Partial Cabinet Solution bundles are intended to make it more cost effective for smaller Users to utilize co-location. All Users would be subject to the same limits on the number of Partial Cabinet Solution bundles and aggregate cabinet footprint. The Exchange believes that the proposal is reasonable because it establishes a manner for the Exchange to treat Users for purposes of assessing aggregate cabinet footprint. The provision is equitable because all Users seeking to purchase a Partial Cabinet Solution bundle would be subject to the same parameters. The Exchange further notes that the proposal would serve to reduce any potential for confusion on how cabinet footprint can be aggregated or what entities would constitute Affiliates.

The Exchange believes that, by aggregating the aggregate cabinet footprint of a User with the aggregate cabinet footprint of its Affiliates for purposes of determining whether the User has satisfied the conditions, the proposed rule change avoids disparate treatment of Users that have divided their various business activities between separate corporate entities, including between a User and a Hosted Customer, as compared to Users that operate those business activities within a single corporate entity. The Exchange believes that setting the common ownership or control threshold in the definition of Affiliates at 50% is reasonable because it will discourage any User from taking deliberate advantage of the proposed Partial Cabinet Solution bundle by setting up separate corporate entities to act as Users or Hosted Customers.

The Exchange believes that it is reasonable that Users that order a Partial Cabinet Solution bundle on or before December 31, 2016 would have their MRC reduced by 50% for the first 12 months because the Partial Cabinet Solution bundles are a new service, and so it is reasonable to offer such reduction as an incentive to Users to utilize the new service. Similarly, the Exchange believes that submitting Users that purchase the propose Partial Cabinet Solution bundle to a 90-day commitment, rather than the 12-month minimum commitment, after which period they would be subject to the 60-day rolling time period, is reasonable. As noted above, the Exchange anticipates that Users of the Partial Cabinet Solution bundles would include those with minimum power or cabinet space demands and Users for which the costs attendant with having a dedicated cabinet or greater network connection bandwidth are too burdensome. The Exchange believes that it is reasonable to have a reduced minimum commitment period for the Partial Cabinet Solution bundle to further reduce the cost commitment for such Users as an incentive to Users to utilize the new service.

The Exchange believes that it is reasonable not to charge a User that changes its Partial Cabinet Solution bundle a second NRC, but instead charge the difference, if any, between the NRCs, because the cost to the Exchange of modifying the service to move a User to a different Partial Cabinet Solution bundle is lower than the cost of the initial installation of a Partial Cabinet Solution bundle.

The Exchange also believes that the services and fees proposed herein for Partial Cabinet Solution bundles are reasonable because if a User purchased each of the components of a Partial Cabinet Solution bundle, whether over several purchases or in one order, and met the conditions described above for access to the Partial Cabinet Solution bundle, the Exchange would automatically treat the User's services as a Partial Cabinet Solution bundle and, effective the date of installation of the final component, reduce the User's MRC to the MRC for the relevant bundle.

The Exchange believes that the proposed change to provide Users access to time feeds is equitable and not unfairly discriminatory because it will result in fees being charged only to Users that voluntarily select to receive the corresponding services and because those services will be available to all Users. Furthermore, the Exchange believes that the services and fees proposed herein are not unfairly discriminatory and are equitably allocated because, in addition to the connectivity to time feeds being completely voluntary, it is available to all Users on an equal basis (*i.e.,* the same connectivity to time feed products and services is available to all Users, and the same conditions described above for access to the Partial Cabinet Solution bundles would apply to all Users). All Users that voluntarily select connectivity to one or more of the proposed time feeds would be charged the same amount for the same services.

The Exchange believes that the proposed change to provide Partial Cabinet Solution bundles is equitable and not unfairly discriminatory because it would be available to all Users that meet the conditions described above for access to the Partial Cabinet Solution bundle and would result in fees being charged only to such Users that voluntarily select to receive the corresponding service.

The Exchange believes that the proposed change to provide Partial Cabinet Solution bundles provides for the equitable allocation of reasonable dues, fees, and other charges among its members, issuers and other persons using its facilities. As previously stated, the proposal would make it more cost effective for Users that meet the conditions described above for access to the Partial Cabinet Solution bundle to utilize co-location. While the Exchange expects that the majority of Users that purchase a Partial Cabinet Solution bundle will not previously have been a User or Hosted Customer, it recognizes that it is possible that purchasing Users may include entities that otherwise would be Hosted Customers. However, it notes that being a Hosted Customer and being a User with a Partial Cabinet Solution bundle are not fungible. A Hosting User manages the service provided to the Hosted Customer, which services may include, for example, supporting the Hosted Customer's technology, whether hardware or software. The Hosted Customer has no relationship with the Exchange. A User with a Partial Cabinet Solution bundle, by contrast, is responsible for supporting its own technology and is in a direct contractual relationship with the Exchange. Providing entities with the additional option of the Partial Cabinet Solution bundle will allow them to select the relationship and type of service that better corresponds to their needs and resources.

Furthermore, the Exchange believes that the Partial Cabinet Solution bundle services and fees proposed herein are not unfairly discriminatory and are equitably allocated because, in addition to the services being completely voluntary, they are available to all Users on an equal basis (*i.e.,* the same products and services are available to all Users, and the same conditions described above for access to the Partial Cabinet Solution bundles would apply to all Users). All Users that voluntarily select the proposed Partial Cabinet Solution bundle service would be subject to the same limits on the number of Partial Cabinet Solution bundles and aggregate cabinet footprint. The Exchange believes that, by aggregating the aggregate cabinet footprint of a User with the aggregate cabinet footprint of its Affiliates for purposes of determining whether the User has satisfied the conditions, the proposed limit on aggregate cabinet footprint avoids disparate treatment of Users that have divided their various business activities between separate corporate entities, including between a User and a Hosted Customer, as compared to Users that operate those business activities within

a single corporate entity. Finally, all Users that order a bundle on or before December 31, 2016 would have their MRC reduced by 50% for the first 12 months.

The Exchange believes that it is equitable and not unfairly discriminatory to not charge a User that changes its Partial Cabinet Solution bundle a second NRC, but instead charge the difference, if any, between the NRCs, because the cost to the Exchange of modifying the service to move a User to a different Partial Cabinet Solution bundle is lower than the cost of the initial installation of a Partial Cabinet Solution bundle.

The Exchange also believes that the services and fees proposed herein for Partial Cabinet Solution bundles are not unfairly discriminatory and are equitably allocated because if a User purchased each of the components of a Partial Cabinet Solution bundle, whether over several purchases or in one order, and met the conditions described above for access to the Partial Cabinet Solution bundle, the Exchange would automatically treat the User's services as a Partial Cabinet Solution bundle and, effective the date of installation of the final component, reduce the User's MRC to the MRC for the relevant bundle.

For the reasons above, the proposed changes do not unfairly discriminate between or among market participants that are otherwise capable of satisfying any applicable co-location fees, requirements, terms and conditions established from time to time by the Exchange. Finally, the Exchange believes that it is subject to significant competitive forces, as described below in the Exchange's statement regarding the burden on competition.

For these reasons, the Exchange believes that the proposal is consistent with the Act.

B. Self-Regulatory Organization's Statement on Burden on Competition

In accordance with Section 6(b)(8) of the Act,[27] the Exchange believes that the proposed rule change will not impose any burden on competition that is not necessary or appropriate in furtherance of the purposes of the Act because, in addition to the proposed services being completely voluntary, they are available to all Users on an equal basis (*i.e.* the same products and services are available to all Users, and the same conditions described above for access to the Partial Cabinet Solution bundles would apply to all Users).

The Exchange believes that providing Users with connectivity to time feeds will not impose any burden on competition that is not necessary or appropriate in furtherance of the purposes of the Act because such connectivity satisfies User demand for a convenient way to access time protocols. Having connectivity to different time feed options would allow a User with a dedicated cabinet to select the time protocol that best suits its needs, and for a User with a partial cabinet to select between the NTP and PTP, helping Users tailor their data center operations to the requirements of their business operations. In addition, the Exchange believes that providing connectivity to GPS for dedicated cabinets but not partial cabinets and to NTP through the LCN but not the IP network will not impose any burden on competition that is not necessary or appropriate in furtherance of the purposes of the Act because the Exchange proposes to offer connectivity to time feeds, including GPS and NTP, as a convenience to Users, and usage of a time feed has no effect on a User's orders going to, or trade data coming from, the Exchange.

The Exchange believes that allowing Users to purchase Partial Cabinet Solution bundles will not impose any burden on competition that is not necessary or appropriate in furtherance of the purposes of the Act because such access will satisfy User demand for cost effective options for smaller Users that choose to utilize co-location. All Users that meet the conditions described above for access to the Partial Cabinet Solution bundle would be subject to the same limits on the number of Partial Cabinet Solution bundles and aggregate cabinet footprint, all Users that order a bundle on or before December 31, 2016 would have their MRC reduced by 50% for the first 12 months, and all Users that change Partial Cabinet Solution bundles would not be charged a second NRC, but instead charged the difference, if any, between the NRCs.

The Exchange believes that allowing Users to purchase Partial Cabinet Solution bundles will not impose any burden on competition that is not necessary or appropriate in furtherance of the purposes of the Act because, as previously stated, the proposal would make it more cost effective for Users that meet the conditions described above for access to the Partial Cabinet Solution bundle to utilize co-location. While the Exchange expects that the majority of Users that purchase a Partial Cabinet Solution bundle will not previously have been a User or Hosted Customer, it recognizes that it is possible that purchasing Users may include entities that otherwise would be Hosted Customers. However, it notes that being a Hosted Customer and being a User with a Partial Cabinet Solution bundle are not fungible. A Hosting User manages the service provided to the Hosted Customer, which services may include, for example, supporting the Hosted Customer's technology, whether hardware or software. The Hosted Customer has no relationship with the Exchange. A User with a Partial Cabinet Solution bundle, by contrast, is responsible for supporting its own technology and is in a direct contractual relationship with the Exchange. Providing entities with the additional option of the Partial Cabinet Solution bundle will allow them to select the relationship and type of service that better corresponds to their needs and resources.

The proposed changes will also enhance competition by making it more cost effective for Users that meet the conditions described above for access to the Partial Cabinet Solution bundle to utilize co-location by creating a convenient way to create a colocation environment, through Partial Cabinet Solution bundles with options with respect to cabinet footprint and network connections. Such Users may choose to pass on such cost savings to their customers.

Finally, the Exchange notes that it operates in a highly competitive market in which market participants can readily favor competing venues if they deem fee levels at a particular venue to be excessive. In such an environment, the Exchange must continually review, and consider adjusting, its services and related fees and credits to remain competitive with other exchanges. For the reasons described above, the Exchange believes that the proposed rule change reflects this competitive environment.

C. Self-Regulatory Organization's Statement on Comments on the Proposed Rule Change Received From Members, Participants, or Others

No written comments were solicited or received with respect to the proposed rule change.

III. Date of Effectiveness of the Proposed Rule Change and Timing for Commission Action

Within 45 days of the date of publication of this notice in the **Federal Register** or within such longer period (i) as the Commission may designate up to 90 days of such date if it finds such longer period to be appropriate and publishes its reasons for so finding or

[27] 15 U.S.C. 78f(b)(8).

(ii) as to which the Exchange consents, the Commission shall: (a) By order approve or disapprove such proposed rule change, or (b) institute proceedings to determine whether the proposed rule change should be disapproved.

IV. Solicitation of Comments

Interested persons are invited to submit written data, views, and arguments concerning the foregoing, including whether the proposed rule change is consistent with the Act. Comments may be submitted by any of the following methods:

Electronic Comments

- Use the Commission's Internet comment form (*http://www.sec.gov/rules/sro.shtml*); or
- Send an email to *rule-comments@sec.gov.* Please include File No. SR–NYSEMKT–2015–89 on the subject line.

Paper Comments

- Send paper comments in triplicate to Secretary, Securities and Exchange Commission, 100 F Street NE., Washington, DC 20549–1090.

All submissions should refer to File No. SR–NYSEMKT–2015–89. This file number should be included on the subject line if email is used. To help the Commission process and review your comments more efficiently, please use only one method. The Commission will post all comments on the Commission's Internet Web site (*http://www.sec.gov/rules/sro.shtml*). Copies of the submission, all subsequent amendments, all written statements with respect to the proposed rule change that are filed with the Commission, and all written communications relating to the proposed rule change between the Commission and any person, other than those that may be withheld from the public in accordance with the provisions of 5 U.S.C. 552, will be available for Web site viewing and printing in the Commission's Public Reference Room, 100 F Street NE., Washington, DC 20549 on official business days between the hours of 10:00 a.m. and 3:00 p.m. Copies of such filing also will be available for inspection and copying at the principal office of the Exchange. All comments received will be posted without change; the Commission does not edit personal identifying information from submissions. You should submit only information that you wish to make available publicly. All submissions should refer to File No. SR–NYSEMKT–2015–89, and should be submitted on or before January 6, 2016.

For the Commission, by the Division of Trading and Markets, pursuant to delegated authority.[28]

Brent J. Fields,

Secretary.

[FR Doc. 2015–31577 Filed 12–15–15; 8:45 am]

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SECURITIES AND EXCHANGE COMMISSION

[Release No. 34–76612; File No. SR–NYSE–2015–53]

Self-Regulatory Organizations; New York Stock Exchange LLC; Notice of Filing of Proposed Rule Change to Its Rules To Provide That the Co-Location Services Offered by the Exchange Include Three Time Feeds and Four Bundles of Co-Location Services

December 10, 2015.

Pursuant to Section 19(b)(1)[1] of the Securities Exchange Act of 1934 (the ''Act'')[2] and Rule 19b–4 thereunder,[3] notice is hereby given that, on November 27, 2015, New York Stock Exchange LLC (''NYSE'' or the ''Exchange'') filed with the Securities and Exchange Commission (the ''Commission'') the proposed rule change as described in Items I and II below, which Items have been prepared by the self-regulatory organization. The Commission is publishing this notice to solicit comments on the proposed rule change from interested persons.

I. Self-Regulatory Organization's Statement of the Terms of the Substance of the Proposed Rule Change

The Exchange proposes to change its rules to provide that the co-location services offered by the Exchange include three time feeds and four bundles of co-location services (''Partial Cabinet Solution bundles''). The Exchange proposes to amend the Exchange's Price List (''Price List'') to reflect the time feeds and the Partial Cabinet Solution bundles.

The text of the proposed rule change is available on the Exchange's Web site at *www.nyse.com,* at the principal office of the Exchange, and at the Commission's Public Reference Room.

II. Self-Regulatory Organization's Statement of the Purpose of, and Statutory Basis for, the Proposed Rule Change

In its filing with the Commission, the self-regulatory organization included statements concerning the purpose of, and basis for, the proposed rule change and discussed any comments it received on the proposed rule change. The text of those statements may be examined at the places specified in Item IV below. The Exchange has prepared summaries, set forth in sections A, B, and C below, of the most significant parts of such statements.

A. Self-Regulatory Organization's Statement of the Purpose of, and Statutory Basis for, the Proposed Rule Change

1. Purpose

The Exchange proposes to change its rules to provide that the co-location[4] services offered by the Exchange include three time feeds and four new Partial Cabinet Solution bundles. In addition, the Exchange proposes to amend the Price List to reflect the time feeds and the Partial Cabinet Solution bundles. The Exchange proposes to offer the Partial Cabinet Solution bundles beginning January 1, 2016.

Time Feeds

The proposed rule change would provide that Users[5] may purchase access to three time feeds, each of which provides a feed with the current time of day using one of three different time protocols: GPS Time Source, the Network Time Protocol feed (''NTP''), and Precision Timing Protocol (''PTP'').[6]

Time feeds are used to receive time and to synchronize clocks between computer systems or throughout a

[28] 17 CFR 200.30–3(a)(12).

[1] 15 U.S.C.78s(b)(1).

[2] 15 U.S.C. 78a.

[3] 17 CFR 240.19b–4.

[4] The Exchange initially filed rule changes relating to its co-location services with the Securities and Exchange Commission (''Commission'') in 2010. *See* Securities Exchange Act Release No. 62960 (September 21, 2010), 75 FR 59310 (September 27, 2010) (SR–NYSE–2010–56) (the ''Original Co-location Filing''). The Exchange operates a data center in Mahwah, New Jersey (the ''data center'') from which it provides co-location services to Users.

[5] For purposes of the Exchange's co-location services, a ''User'' means any market participant that requests to receive co-location services directly from the Exchange, a ''Hosting User'' means a User that hosts a Hosted Customer in the User's co-location space, and a ''Hosted Customer'' means a customer of a Hosting User that is hosted in a Hosting User's co-location space. *See* Securities Exchange Act Release No. 76008 (September 29, 2015), 80 FR 60190 (October 5, 2015) (SR–NYSE–2015–40). As specified in the Price List, a User that incurs co-location fees for a particular co-location service pursuant thereto would not be subject to co-location fees for the same co-location service charged by the Exchange's affiliates NYSE MKT LLC and NYSE Arca, Inc. *See* Securities Exchange Act Release No. 70206 (August 15, 2013), 78 FR 51765 (August 21, 2013) (SR–NYSE–2013–59).

[6] The time feeds are unrelated to trading on the Exchange or the Exchange's data feeds. A User does not require connectivity to a time feed to trade on the Exchange, and usage of a time feed has no effect on a User's orders going to, or trade data coming from, the Exchange.

computer network. A User may opt to connect to a time feed for various reasons, including record keeping or measuring response times.[7] The proposed connectivity to time feeds would provide Users a convenient way to access time protocols.

The proposed change includes three time feeds. Global Positioning System (''GPS'') is a time and location system maintained by the United States government. The Exchange accesses the GPS Time Source feed through dedicated equipment and subscribing Users connect to the feed over dedicated cables. For the NTP and PTP time feeds, the Exchange routes the GPS data through dedicated equipment that reformats the GPS data into NTP and PTP.[8] Subscribing Users connect to PTP over dedicated cables and NTP over the Liquidity Center Network (''LCN''), a local area network available in the data center.

Currently, the Exchange's co-location services allow a User to request a physical cabinet to house its servers and other equipment in the data center. A User has the option of receiving an entire cabinet that is dedicated solely to that User (''dedicated cabinet'') or a partial cabinet available in increments of eight-rack units of space (''partial cabinet'').[9] Connectivity to all three time protocols would be available for dedicated cabinets. Due to technical limitations, connectivity to the NTP and PTP would be available for partial cabinets, but connectivity to GPS would not.[10]

The Exchange proposes to amend its Price List to reflect fees related to these services, as follows:

Connection to Time Protocol Feed	Network Time Protocol Feed (Note: LCN only)	$300 initial charge plus $100 monthly.
	Precision Time Protocol	$1,000 initial charge plus $250 monthly.
	GPS Time Source (Note: dedicated cabinets only).	$3,000 initial charge plus $400 monthly.

Users that order the proposed time feed services will be subject to a 12-month minimum commitment, after which period they are subject to a 60-day rolling time period.[11]

Partial Cabinet Solution Bundles

The Exchange proposes to offer four Partial Cabinet Solution bundles intended to make it more cost effective for smaller Users to utilize co-location. These proposed Partial Cabinet Solution bundles would provide smaller Users a convenient way to create a colocation environment, by including in each Partial Cabinet Solution bundle cabinet space, network access, fiber connections (''cross connects''), and the choice of either the NTP or PTP time feed. The Exchange expects that such Users would include those with minimal power or cabinet space demands and Users for which the costs attendant with having a dedicated cabinet or greater network connection bandwidth are too burdensome. The Exchange expects that the majority of Users that purchase a Partial Cabinet Solution bundle will not previously have been a User or Hosted Customer, but recognizes that it is possible that purchasing Users may include entities that otherwise would be Hosted Customers. The Exchange proposes to offer the Partial Cabinet Solution bundles beginning January 1, 2016.

As noted above, currently a User may opt to receive a partial cabinet available in increments of eight-rack units of space. Each partial cabinet is allocated up to two kilowatts (''kWs'') of power. In addition, the Exchange offers Users access to two local area networks available in the data center: The LCN and the internet protocol (''IP'') network.[12] The Exchange offers 1 and 10 gigabit (''Gb'') IP network access, 1, 10, and 40 Gb LCN network access, and LCN 10 Gb LX network access.[13]

Users may use cross connects to connect cabinets within the data center, including between a User's cabinet and a non-User's equipment within the data center. For example, a User may utilize a cross connect with a non-User to connect to a carrier's equipment in order to access the carrier's network outside the data center.[14]

The Exchange proposes to offer four Partial Cabinet Solution bundles. Because the Partial Cabinet Solution bundles are intended to make it more cost effective for smaller Users to utilize co-location, the Exchange proposes only to provide access to a Partial Cabinet Solution bundle to a User that meets the following conditions: (1) The User purchases only one Partial Cabinet Solution bundle; (2) the User and its Affiliates[15] do not currently have a Partial Cabinet Solution bundle; and (3) after the purchase of the Partial Cabinet Solution bundle, the User, together with its Affiliates, will have an aggregate cabinet footprint of no more than 2 kW.[16] A User's aggregate cabinet footprint is the total kW of its cabinets, including both partial and dedicated

[7] For example, a User may connect to a time feed for record keeping purposes if it uses that specific time protocol for all its activities, both inside and out of the data center.

[8] The reformatting equipment is programmed by the vendor to generate NTP and PTP time feeds that comply with industry standards. The Exchange does not program or manage the reformatting of the GPS data into NTP and PTP.

[9] *See* Original Co-location Filing, at 59310 and Securities Exchange Act Release No. 71122 (December 18, 2013), 78 FR 77739 (December 24, 2013) (SR–NYSE–2013–81) (notice of filing and immediate effectiveness of proposed rule change to offer partial cabinets).

[10] The Exchange does not propose to make connectivity to GPS available for partial cabinets because the proximity of the GPS and power connections into a partial cabinet would expose GPS to interference from the cable power connections, interfering with the delivery of the GPS data.

[11] The Exchange believes that the 12-month minimum period is common practice for colocation offerings. *See, e.g.,* Securities Exchange Act Release No. 68735 (January 25, 2013), 78 FR 6842 (January 31, 2013) (SR–NASDAQ–2012–119) (noting that NASDAQ represented that the lock-in feature ''is common practice for colocation offerings''). If a User upgrades a service (*i.e.,* goes from a 10 Gb to a 40 Gb LCN circuit), it will not be held to the minimum period for the first service, but will be subject to a 12-month minimum period for the upgraded service, starting from the date of the upgrade.

[12] *See* Original Co-location Filing, at 59311 and Securities Exchange Act Release Nos. 74222 (February 6, 2015), 80 FR 7888 (February 12, 2015) (SR–NYSE–2015–05) (notice of filing and immediate effectiveness of proposed rule change to include IP network connections and fiber cross connects between a User's cabinet and a non-User's equipment) (''Release No. 74222'') and 70888 (November 15, 2013), 78 FR 69907 (November 21, 2013) (SR–NYSE–2013–73) (notice of filing and immediate effectiveness of proposed rule change to include LCN 10 Gb LX connection).

[13] The Exchange also proposes to provide 40 Gb IP network access. The 40 Gb IP network connection is expected to be available no later than April 15, 2016. The Exchange will announce the date that the 40 Gb IP network connection will be available through a customer notice. *See* Securities Exchange Act Release No. 76369 (November 5, 2015), 80 FR 70027 (November 12, 2015) (SR–NYSE–2015–54) (notice of filing and immediate effectiveness of proposed rule change to include IP 40 Gb network connections).

[14] *See* Release No. 74222, *supra* note 12.

[15] For purposes of the Partial Cabinet Solution bundles, an ''Affiliate'' of a User would be any other User or a Hosted Customer that is under 50% or greater common ownership or control of the first User.

[16] For example, a User with a 4 kW dedicated cabinet would not be eligible for a Partial Cabinet Solution bundle, as its aggregate cabinet footprint would be either 5 kW or 6 kW once a Partial Cabinet Solution bundle was added.

cabinets, and a Hosted Customer's aggregate cabinet footprint is the total kW of the portion of the Hosting User's cabinet, whether partial or dedicated, allocated to such Hosted Customer.[17]

The Exchange proposes to aggregate the aggregate cabinet footprint of a User of a Partial Cabinet Solution bundle with the aggregate cabinet footprint of its Affiliates for purposes of determining whether the User has satisfied the conditions in order to avoid disparate treatment of Users that have divided their various business activities between separate corporate entities, including between a User and a Hosted Customer, as compared to Users that operate those business activities within a single corporate entity. Accordingly, the Exchange proposes that a User requesting a Partial Cabinet Solution bundle be required to represent to the Exchange (a) whether it has any Affiliates that are Users or Hosted Customers, and (b) that its aggregate cabinet footprint, together with the aggregate cabinet footprint of its Affiliates that are also Users or Hosted Customers and the cabinet footprint of the Partial Cabinet Solution bundle, will not exceed 2 kW. In addition, the User of a Partial Cabinet Solution bundle would be required to inform the Exchange immediately of any event that causes another User or Hosted Customer to become an Affiliate.[18] The Exchange proposes to revise the Price List accordingly.

If a User of a Partial Cabinet Solution bundle became Affiliated with one or more other Users or Hosted Customers and thereby no longer met the conditions for access to the Partial Cabinet Solution bundle, or if the User otherwise ceased to meet the conditions for access, the Exchange would no longer offer access to the Partial Cabinet Solution bundle to such User. Once the User ceased to meet the conditions for access to the Partial Cabinet Solution bundle, it would be charged for each of the services individually, at the price for each such service set out in the Price List. Such price change would be effective as of the date that the User ceased to meet the conditions.

The Exchange proposes that Users that purchase a Partial Cabinet Solution bundle would be charged a non-recurring initial charge (''NRC'') and a monthly recurring charge (''MRC'').[19] The Exchange proposes that Users that order a Partial Cabinet Solution bundle on or before December 31, 2016 would have their MRC reduced by 50% for the first 12 months.

The Exchange proposes to amend its Price List to reflect fees related to these new services, as follows:

Type of service	Description	Amount of charge
Partial Cabinet Solution bundles (effective from January 1, 2016). Note: A User and its Affiliates are limited to one Partial Cabinet Solution bundle at a time. A User and its Affiliates must have an aggregate cabinet footprint of 2 kW or less to qualify for a Partial Cabinet Solution bundle.	Option A: ..... 1 kW partial cabinet, 1 LCN connection (1 Gb), 1 IP network connection (1 Gb), 2 fiber cross connections and either the Network Time Protocol Feed or Precision Timing Protocol.	$7,500 initial charge per bundle plus monthly charge per bundle as follows: • For Users that order on or before December 31, 2016: $3,000 monthly for first 12 months of service, and $6,000 monthly thereafter. • For Users that order after December 31, 2016: $6,000 monthly.
	Option B: 2 kW partial cabinet, 1 LCN connection (1 Gb), 1 IP network connection (1 Gb), 2 fiber cross connections and either the Network Time Protocol Feed or Precision Timing Protocol.	$7,500 initial charge per bundle plus monthly charge per bundle as follows: • For Users that order on or before December 31, 2016: $3,500 monthly for first 12 months of service, and $7,000 monthly thereafter. • For Users that order after December 31, 2016: $7,000 monthly.
	Option C: 1 kW partial cabinet, 1 LCN connection (10 Gb), 1 IP network connection (10 Gb), 2 fiber cross connections and either the Network Time Protocol Feed or Precision Timing Protocol.	$10,000 initial charge per bundle plus monthly charge per bundle as follows: • For Users that order on or before December 31, 2016: $7,000 monthly for first 12 months of service, and $14,000 monthly thereafter. • For Users that order after December 31, 2016: $14,000 monthly.
	Option D: 2 kW partial cabinet, 1 LCN connection (10 Gb), 1 IP network connection (10 Gb), 2 fiber cross connections and either the Network Time Protocol Feed or Precision Timing Protocol.	$10,000 initial charge per bundle plus monthly charge per bundle as follows: • For Users that order on or before December 31, 2016: $7,500 monthly for first 12 months of service, and $15,000 monthly thereafter. • For Users that order after December 31, 2016: $15,000 monthly.

Each proposed Partial Cabinet Solution bundle is made up of a number of different services. If a User purchased each of the components of a Partial Cabinet Solution bundle, whether over several purchases or in one order, and met the conditions described above for access to the Partial Cabinet Solution bundle, the Exchange would automatically treat the User's services as a Partial Cabinet Solution bundle and, effective the date of installation of the

[17] The Exchange similarly aggregates eligible activity of member organization affiliates for purposes of charges or credits based on volume. *See* Securities Exchange Act Release No. 74640 (April 2, 2015), 80 FR 18873 (April 8, 2015) (SR–NYSE–2015–13). The threshold percentage used in the definition of ''affiliate'' for purposes of charges or credits based on volume is 75%. *Id.* The Exchange proposes a lower threshold in the present case in order to discourage any User from taking deliberate advantage of the proposed Partial Cabinet Solution bundle by setting up separate corporate entities to act as Users or Hosted Customers.

[18] The Exchange would review available information regarding the entities and may request additional information to verify the Affiliate status of a User or Hosted Customer. The Exchange would approve a request for a Partial Cabinet Solution bundle unless it determines that the certification is not accurate.

[19] A User that changes its Partial Cabinet Solution bundle would not be subject to a second NRC. Rather, it would pay the difference, if any, between the NRCs. For example, a User that buys an Option A Partial Cabinet Solution bundle would pay a $7,500 NRC. If it then opted to change to Option C, it would pay $2,500, *i.e.* the difference between the Option A and Option C NRCs of $7,500 and $10,000, respectively.

final component, reduce the User's MRC to the MRC for the relevant bundle.[20]

Finally, the Exchange proposes to make non-substantive changes to the Price List to add subheadings under ''Co-Location Fees'' for ''Definitions'' and ''General Notes''. Definitions of aggregate cabinet footprint and Affiliate would be added under ''Definitions''. The existing note stating that a User that incurs co-location fees for a particular co-location service would not be subject to co-location fees for the same co-location service charged by the Exchange's affiliates would become note one under ''General Notes'' and the proposed provisions regarding aggregate cabinet footprints and what portion of an NRC, if any, a User would be subject to if it changed bundles would become note two.[21]

Users that purchase a proposed Partial Cabinet Solution bundle would not be subject to the 12-month minimum commitment, but rather would be subject to a 90-day commitment, after which period they would be subject to the 60-day rolling time period. As noted above, the Exchange anticipates that Users of the Partial Cabinet Solution bundles would include those with minimum power or cabinet space demands and Users for which the costs attendant with having a dedicated cabinet or greater network connection bandwidth are too burdensome. The Exchange proposes to have a reduced minimum commitment period for the Partial Cabinet Solution bundle to further reduce the cost commitment for such Users.

General

As is the case with all Exchange co-location arrangements, (i) neither a User nor any of the User's customers would be permitted to submit orders directly to the Exchange unless such User or customer is a member organization, a Sponsored Participant or an agent thereof (*e.g.,* a service bureau providing order entry services); (ii) use of the co-location services proposed herein would be completely voluntary and available to all Users on a non-discriminatory basis; [22] and (iii) a User would only incur one charge for the particular co-location service described herein, regardless of whether the User connects only to the Exchange or to the Exchange and one or both of its affiliates.[23]

The proposed change is not otherwise intended to address any other issues relating to co-location services and/or related fees, and the Exchange is not aware of any problems that Users would have in complying with the proposed change.

2. Statutory Basis

The Exchange believes that the proposed rule change is consistent with Section 6(b) of the Act,[24] in general, and furthers the objectives of Sections 6(b)(5) of the Act,[25] in particular, because it is designed to prevent fraudulent and manipulative acts and practices, to promote just and equitable principles of trade, to foster cooperation and coordination with persons engaged in regulating, clearing, settling, processing information with respect to, and facilitating transactions in securities, to remove impediments to, and perfect the mechanisms of, a free and open market and a national market system and, in general, to protect investors and the public interest and because it is not designed to permit unfair discrimination between customers, issuers, brokers, or dealers.

The Exchange believes that providing connectivity to time feeds is not designed to permit unfair discrimination between customers, issuers, brokers, or dealers because the service would offer connectivity to different time feed options, allowing a User that opts to connect to a time feed to select the time protocol that best suits its needs, helping it tailor its data center operations to the requirements of its business operations. The time feeds are unrelated to trading on the Exchange or the Exchange's data feeds. A User does not require connectivity to a time feed to trade on the Exchange, and usage of a time feed has no effect on a User's orders going to, or trade data coming from, the Exchange.

The Exchange believes that providing connectivity to GPS for dedicated cabinets but not partial cabinets and to NTP through the LCN but not the IP network is not designed to permit unfair discrimination between customers, issuers, brokers, or dealers because the Exchange proposes to offer connectivity to time feeds, including GPS and NTP, as a convenience to Users, and usage of a time feed has no effect on a User's orders going to, or trade data coming from, the Exchange. Regarding GPS, the proximity of GPS and power connections into a partial cabinet would expose GPS to interference from the cable power connections, interfering with the delivery of the GPS data, and so the Exchange is not able to offer connectivity to GPS for partial cabinets. A User that requires connectivity to GPS could opt to purchase a dedicated cabinet or become a Hosted Customer of a Hosting User with a dedicated cabinet. Regarding NTP, the Exchange has opted to offer the NTP only over the LCN due to a lack of demand for the NTP over the IP network. A User that requires connectivity to NTP could connect to the LCN.

The Exchange believes that the Partial Cabinet Solution bundles are not designed to permit unfair discrimination between customers, issuers, brokers, or dealers because the Partial Cabinet Solution bundles would offer four different Partial Cabinet Solution bundles with options with respect to cabinet footprint and network connections. Users that require other sizes or combinations of cabinets, network connections and cross connects could still request them.

The Exchange believes that its proposal would remove impediments to, and perfects the mechanisms of, a free and open market and a national market system and, in general, protects investors and the public interest because the proposed connectivity to time feeds would provide Users a convenient way to access time protocols. Having different time feed options would allow a User with a dedicated cabinet to select the time protocol that suits its needs, and for a User with a partial cabinet to select between the NTP and PTP.

In addition, the Exchange believes that its proposal would remove impediments to, and perfects the mechanisms of, a free and open market and a national market system and, in general, protects investors and the public interest because the proposed Partial Cabinet Solution bundles would make it more cost effective for Users

[20] The Exchange proposes to implement the proposed Partial Cabinet Solution bundle changes effective January 1, 2016. If as of that date a User already had each of the components of a Partial Cabinet Solution bundle and met the conditions described above for access to the Partial Cabinet Solution bundle, the Exchange would automatically treat the User's services as a Partial Cabinet Solution bundle and reduce the User's MRC to the MRC for the relevant bundle, effective January 1, 2016.

[21] *See* note 18, *supra.*

[22] As is currently the case, Users that receive co-location services from the Exchange will not receive any means of access to the Exchange's trading and execution systems that is separate from, or superior to, that of other Users. In this regard, all orders sent to the Exchange enter the Exchange's trading and execution systems through the same order gateway, regardless of whether the sender is co-located in the data center or not. In addition, co-located Users do not receive any market data or data service product that is not available to all Users, although Users that receive co-location services normally would expect reduced latencies in sending orders to, and receiving market data from, the Exchange.

[23] *See* SR–NYSE–2013–59, *supra* note 5 at 51766. The Exchange's affiliates have also submitted the same proposed rule change to propose the changes described herein. *See* SR–NYSEMKT–2015–89 and SR–NYSEArca–2015–102.

[24] 15 U.S.C. 78f(b).

[25] 15 U.S.C. 78f(b)(5).

that meet the conditions described above for access to the Partial Cabinet Solution bundle to utilize co-location by creating a convenient way to create a colocation environment, through four Partial Cabinet Solution bundles with options with respect to cabinet footprint and network connections. The Exchange expects that such Users would include those with minimal power or cabinet space demands and Users for which the costs attendant with having a dedicated cabinet or greater network connection bandwidth are too burdensome. Such Users may choose to pass on such cost savings to their customers. The Exchange expects that the majority of Users that purchase a Partial Cabinet Solution bundle will not previously have been a User or Hosted Customer, but recognizes that it is possible that purchasing Users may include entities that otherwise would be Hosted Customers.

The Exchange also believes that the proposed rule change is consistent with Section 6(b)(4) of the Act,[26] in particular, because it provides for the equitable allocation of reasonable dues, fees, and other charges among its members, issuers and other persons using its facilities and does not unfairly discriminate between customers, issuers, brokers or dealers. Overall, the Exchange believes that the proposed fees for the time feed connectivity and Partial Cabinet Solution bundles are reasonable because the Exchange proposes to offer the services as a convenience to Users, but in doing so will incur certain costs, including costs related to the data center facility, hardware and equipment and costs related to personnel required for initial installation and monitoring, support and maintenance of such services. The higher fee in connection with the GPS reflects the greater costs for its equipment, installation and maintenance in comparison with the other time feeds. The Exchange believes that submitting Users that order the proposed time feed services to a 12-month minimum commitment, after which period they would be subject a 60-day rolling time period, is reasonable, as it reflects the investment the Exchange incurs in order to provide the service. The Exchange believes that the 12-month minimum period is common practice for colocation offerings.

In addition, the Exchange believes that its proposal to limit access to Partial Cabinet Solution bundles to a User that meets the conditions described above, specifically, that (1) the User purchases only one Partial Cabinet Solution bundle, (2) the User and its Affiliates do not currently have a Partial Cabinet Solution bundle, and, (3) after the purchase of a Partial Cabinet Solution bundle, the User, together with its Affiliates, will have an aggregate cabinet footprint of no more than 2 kW, is reasonable, because the Partial Cabinet Solution bundles are intended to make it more cost effective for smaller Users to utilize co-location. All Users would be subject to the same limits on the number of Partial Cabinet Solution bundles and aggregate cabinet footprint. The Exchange believes that the proposal is reasonable because it establishes a manner for the Exchange to treat Users for purposes of assessing aggregate cabinet footprint. The provision is equitable because all Users seeking to purchase a Partial Cabinet Solution bundle would be subject to the same parameters. The Exchange further notes that the proposal would serve to reduce any potential for confusion on how cabinet footprint can be aggregated or what entities would constitute Affiliates.

The Exchange believes that, by aggregating the aggregate cabinet footprint of a User with the aggregate cabinet footprint of its Affiliates for purposes of determining whether the User has satisfied the conditions, the proposed rule change avoids disparate treatment of Users that have divided their various business activities between separate corporate entities, including between a User and a Hosted Customer, as compared to Users that operate those business activities within a single corporate entity. The Exchange believes that setting the common ownership or control threshold in the definition of Affiliates at 50% is reasonable because it will discourage any User from taking deliberate advantage of the proposed Partial Cabinet Solution bundle by setting up separate corporate entities to act as Users or Hosted Customers.

The Exchange believes that it is reasonable that Users that order a Partial Cabinet Solution bundle on or before December 31, 2016 would have their MRC reduced by 50% for the first 12 months because the Partial Cabinet Solution bundles are a new service, and so it is reasonable to offer such reduction as an incentive to Users to utilize the new service. Similarly, the Exchange believes that submitting Users that purchase the propose Partial Cabinet Solution bundle to a 90-day commitment, rather than the 12-month minimum commitment, after which period they would be subject to the 60-day rolling time period, is reasonable. As noted above, the Exchange anticipates that Users of the Partial Cabinet Solution bundles would include those with minimum power or cabinet space demands and Users for which the costs attendant with having a dedicated cabinet or greater network connection bandwidth are too burdensome. The Exchange believes that it is reasonable to have a reduced minimum commitment period for the Partial Cabinet Solution bundle to further reduce the cost commitment for such Users as an incentive to Users to utilize the new service.

The Exchange believes that it is reasonable not to charge a User that changes its Partial Cabinet Solution bundle a second NRC, but instead charge the difference, if any, between the NRCs, because the cost to the Exchange of modifying the service to move a User to a different Partial Cabinet Solution bundle is lower than the cost of the initial installation of a Partial Cabinet Solution bundle.

The Exchange also believes that the services and fees proposed herein for Partial Cabinet Solution bundles are reasonable because if a User purchased each of the components of a Partial Cabinet Solution bundle, whether over several purchases or in one order, and met the conditions described above for access to the Partial Cabinet Solution bundle, the Exchange would automatically treat the User's services as a Partial Cabinet Solution bundle and, effective the date of installation of the final component, reduce the User's MRC to the MRC for the relevant bundle.

The Exchange believes that the proposed change to provide Users access to time feeds is equitable and not unfairly discriminatory because it will result in fees being charged only to Users that voluntarily select to receive the corresponding services and because those services will be available to all Users. Furthermore, the Exchange believes that the services and fees proposed herein are not unfairly discriminatory and are equitably allocated because, in addition to the connectivity to time feeds being completely voluntary, it is available to all Users on an equal basis (*i.e.,* the same connectivity to time feed products and services is available to all Users, and the same conditions described above for access to the Partial Cabinet Solution bundles would apply to all Users). All Users that voluntarily select connectivity to one or more of the proposed time feeds would be charged the same amount for the same services.

The Exchange believes that the proposed change to provide Partial Cabinet Solution bundles is equitable and not unfairly discriminatory because

[26] 15 U.S.C. 78f(b)(4).

it would be available to all Users that meet the conditions described above for access to the Partial Cabinet Solution bundle and would result in fees being charged only to such Users that voluntarily select to receive the corresponding service.

The Exchange believes that the proposed change to provide Partial Cabinet Solution bundles provides for the equitable allocation of reasonable dues, fees, and other charges among its members, issuers and other persons using its facilities. As previously stated, the proposal would make it more cost effective for Users that meet the conditions described above for access to the Partial Cabinet Solution bundle to utilize co-location. While the Exchange expects that the majority of Users that purchase a Partial Cabinet Solution bundle will not previously have been a User or Hosted Customer, it recognizes that it is possible that purchasing Users may include entities that otherwise would be Hosted Customers. However, it notes that being a Hosted Customer and being a User with a Partial Cabinet Solution bundle are not fungible. A Hosting User manages the service provided to the Hosted Customer, which services may include, for example, supporting the Hosted Customer's technology, whether hardware or software. The Hosted Customer has no relationship with the Exchange. A User with a Partial Cabinet Solution bundle, by contrast, is responsible for supporting its own technology and is in a direct contractual relationship with the Exchange. Providing entities with the additional option of the Partial Cabinet Solution bundle will allow them to select the relationship and type of service that better corresponds to their needs and resources.

Furthermore, the Exchange believes that the Partial Cabinet Solution bundle services and fees proposed herein are not unfairly discriminatory and are equitably allocated because, in addition to the services being completely voluntary, they are available to all Users on an equal basis (*i.e.,* the same products and services are available to all Users, and the same conditions described above for access to the Partial Cabinet Solution bundles would apply to all Users). All Users that voluntarily select the proposed Partial Cabinet Solution bundle service would be subject to the same limits on the number of Partial Cabinet Solution bundles and aggregate cabinet footprint. The Exchange believes that, by aggregating the aggregate cabinet footprint of a User with the aggregate cabinet footprint of its Affiliates for purposes of determining whether the User has satisfied the conditions, the proposed limit on aggregate cabinet footprint avoids disparate treatment of Users that have divided their various business activities between separate corporate entities, including between a User and a Hosted Customer, as compared to Users that operate those business activities within a single corporate entity. Finally, all Users that order a bundle on or before December 31, 2016 would have their MRC reduced by 50% for the first 12 months.

The Exchange believes that it is equitable and not unfairly discriminatory to not charge a User that changes its Partial Cabinet Solution bundle a second NRC, but instead charge the difference, if any, between the NRCs, because the cost to the Exchange of modifying the service to move a User to a different Partial Cabinet Solution bundle is lower than the cost of the initial installation of a Partial Cabinet Solution bundle.

The Exchange also believes that the services and fees proposed herein for Partial Cabinet Solution bundles are not unfairly discriminatory and are equitably allocated because if a User purchased each of the components of a Partial Cabinet Solution bundle, whether over several purchases or in one order, and met the conditions described above for access to the Partial Cabinet Solution bundle, the Exchange would automatically treat the User's services as a Partial Cabinet Solution bundle and, effective the date of installation of the final component, reduce the User's MRC to the MRC for the relevant bundle.

For the reasons above, the proposed changes do not unfairly discriminate between or among market participants that are otherwise capable of satisfying any applicable co-location fees, requirements, terms and conditions established from time to time by the Exchange.

Finally, the Exchange believes that it is subject to significant competitive forces, as described below in the Exchange's statement regarding the burden on competition.

For these reasons, the Exchange believes that the proposal is consistent with the Act.

B. Self-Regulatory Organization's Statement on Burden on Competition

In accordance with Section 6(b)(8) of the Act,[27] the Exchange believes that the proposed rule change will not impose any burden on competition that is not necessary or appropriate in furtherance of the purposes of the Act because, in addition to the proposed services being completely voluntary, they are available to all Users on an equal basis (*i.e.* the same products and services are available to all Users, and the same conditions described above for access to the Partial Cabinet Solution bundles would apply to all Users).

The Exchange believes that providing Users with connectivity to time feeds will not impose any burden on competition that is not necessary or appropriate in furtherance of the purposes of the Act because such connectivity satisfies User demand for a convenient way to access time protocols. Having connectivity to different time feed options would allow a User with a dedicated cabinet to select the time protocol that best suits its needs, and for a User with a partial cabinet to select between the NTP and PTP, helping Users tailor their data center operations to the requirements of their business operations. In addition, the Exchange believes that providing connectivity to GPS for dedicated cabinets but not partial cabinets and to NTP through the LCN but not the IP network will not impose any burden on competition that is not necessary or appropriate in furtherance of the purposes of the Act because the Exchange proposes to offer connectivity to time feeds, including GPS and NTP, as a convenience to Users, and usage of a time feed has no effect on a User's orders going to, or trade data coming from, the Exchange.

The Exchange believes that allowing Users to purchase Partial Cabinet Solution bundles will not impose any burden on competition that is not necessary or appropriate in furtherance of the purposes of the Act because such access will satisfy User demand for cost effective options for smaller Users that choose to utilize co-location. All Users that meet the conditions described above for access to the Partial Cabinet Solution bundle would be subject to the same limits on the number of Partial Cabinet Solution bundles and aggregate cabinet footprint, all Users that order a bundle on or before December 31, 2016 would have their MRC reduced by 50% for the first 12 months, and all Users that change Partial Cabinet Solution bundles would not be charged a second NRC, but instead charged the difference, if any, between the NRCs.

The Exchange believes that allowing Users to purchase Partial Cabinet Solution bundles will not impose any burden on competition that is not necessary or appropriate in furtherance of the purposes of the Act because, as previously stated, the proposal would make it more cost effective for Users

[27] 15 U.S.C. 78f(b)(8).

that meet the conditions described above for access to the Partial Cabinet Solution bundle to utilize co-location. While the Exchange expects that the majority of Users that purchase a Partial Cabinet Solution bundle will not previously have been a User or Hosted Customer, it recognizes that it is possible that purchasing Users may include entities that otherwise would be Hosted Customers. However, it notes that being a Hosted Customer and being a User with a Partial Cabinet Solution bundle are not fungible. A Hosting User manages the service provided to the Hosted Customer, which services may include, for example, supporting the Hosted Customer's technology, whether hardware or software. The Hosted Customer has no relationship with the Exchange. A User with a Partial Cabinet Solution bundle, by contrast, is responsible for supporting its own technology and is in a direct contractual relationship with the Exchange. Providing entities with the additional option of the Partial Cabinet Solution bundle will allow them to select the relationship and type of service that better corresponds to their needs and resources.

The proposed changes will also enhance competition by making it more cost effective for Users that meet the conditions described above for access to the Partial Cabinet Solution bundle to utilize co-location by creating a convenient way to create a colocation environment, through Partial Cabinet Solution bundles with options with respect to cabinet footprint and network connections. Such Users may choose to pass on such cost savings to their customers.

Finally, the Exchange notes that it operates in a highly competitive market in which market participants can readily favor competing venues if they deem fee levels at a particular venue to be excessive. In such an environment, the Exchange must continually review, and consider adjusting, its services and related fees and credits to remain competitive with other exchanges. For the reasons described above, the Exchange believes that the proposed rule change reflects this competitive environment.

C. Self-Regulatory Organization's Statement on Comments on the Proposed Rule Change Received From Members, Participants, or Others

No written comments were solicited or received with respect to the proposed rule change.

III. Date of Effectiveness of the Proposed Rule Change and Timing for Commission Action

Within 45 days of the date of publication of this notice in the **Federal Register** or within such longer period (i) as the Commission may designate up to 90 days of such date if it finds such longer period to be appropriate and publishes its reasons for so finding or (ii) as to which the Exchange consents, the Commission shall: (a) By order approve or disapprove such proposed rule change, or (b) institute proceedings to determine whether the proposed rule change should be disapproved.

IV. Solicitation of Comments

Interested persons are invited to submit written data, views, and arguments concerning the foregoing, including whether the proposed rule change is consistent with the Act. Comments may be submitted by any of the following methods:

Electronic Comments

- Use the Commission's Internet comment form (*http://www.sec.gov/rules/sro.shtml*); or
- Send an email to *rule-comments@sec.gov.* Please include File No. SR–NYSE–2015–53 on the subject line.

Paper Comments

- Send paper comments in triplicate to Secretary, Securities and Exchange Commission, 100 F Street NE., Washington, DC 20549–1090.

All submissions should refer to File No. SR–NYSE–2015–53. This file number should be included on the subject line if email is used. To help the Commission process and review your comments more efficiently, please use only one method. The Commission will post all comments on the Commission's Internet Web site (*http://www.sec.gov/rules/sro.shtml*). Copies of the submission, all subsequent amendments, all written statements with respect to the proposed rule change that are filed with the Commission, and all written communications relating to the proposed rule change between the Commission and any person, other than those that may be withheld from the public in accordance with the provisions of 5 U.S.C. 552, will be available for Web site viewing and printing in the Commission's Public Reference Room, 100 F Street NE., Washington, DC 20549 on official business days between the hours of 10:00 a.m. and 3:00 p.m. Copies of such filing also will be available for inspection and copying at the principal office of the Exchange. All comments received will be posted without change; the Commission does not edit personal identifying information from submissions. You should submit only information that you wish to make available publicly. All submissions should refer to File No. SR–NYSE–2015–53, and should be submitted on or before January 6, 2016.

For the Commission, by the Division of Trading and Markets, pursuant to delegated authority.[28]

Brent J. Fields,

Secretary.

[FR Doc. 2015–31576 Filed 12–15–15; 8:45 am]

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SECURITIES AND EXCHANGE COMMISSION

[Release No. 34–76616; File No. SR–NYSEARCA–2015–102]

Self-Regulatory Organizations; NYSE Arca, Inc.; Notice of Filing of Proposed Rule Change to Its Rules To Provide That the Co-location Services Offered by the Exchange Include Three Time Feeds and Four Bundles of Co-location Services

December 10, 2015.

Pursuant to Section 19(b)(1)[1] of the Securities Exchange Act of 1934 (the ''Act'')[2] and Rule 19b–4 thereunder,[3] notice is hereby given that, on November 27, 2015, NYSE Arca, Inc. (the ''Exchange'' or ''NYSE Arca'') filed with the Securities and Exchange Commission (the ''Commission'') the proposed rule change as described in Items I and II below, which Items have been prepared by the self-regulatory organization. The Commission is publishing this notice to solicit comments on the proposed rule change from interested persons.

I. Self-Regulatory Organization's Statement of the Terms of the Substance of the Proposed Rule Change

The Exchange proposes to change its rules to provide that the co-location services offered by the Exchange include three time feeds and four bundles of co-location services (''Partial Cabinet Solution bundles''). The Exchange proposes to amend the NYSE Arca Options Fee Schedule (the ''Options Fee Schedule'') and, through its wholly owned subsidiary NYSE Arca Equities, Inc. (''NYSE Arca Equities''), the NYSE Arca Equities Schedule of

[28] 17 CFR 200.30–3(a)(12).

[1] 15 U.S.C. 78s(b)(1).

[2] 15 U.S.C. 78a.

[3] 17 CFR 240.19b–4.

Fees and Charges for Exchange Services (the ''Equities Fee Schedule'' and, together with the Options Fee Schedule, the ''Fee Schedules'') to reflect the time feeds and the Partial Cabinet Solution bundles. The text of the proposed rule change is available on the Exchange's Web site at *www.nyse.com,* at the principal office of the Exchange, and at the Commission's Public Reference Room.

II. Self-Regulatory Organization's Statement of the Purpose of, and Statutory Basis for, the Proposed Rule Change

In its filing with the Commission, the self-regulatory organization included statements concerning the purpose of, and basis for, the proposed rule change and discussed any comments it received on the proposed rule change. The text of those statements may be examined at the places specified in Item IV below. The Exchange has prepared summaries, set forth in sections A, B, and C below, of the most significant parts of such statements.

A. Self-Regulatory Organization's Statement of the Purpose of, and Statutory Basis for, the Proposed Rule Change

1. Purpose

The Exchange proposes to change its rules to provide that the co-location [4] services offered by the Exchange include three time feeds and four new Partial Cabinet Solution bundles. In addition, the Exchange proposes to amend the Fee Schedules to reflect the time feeds and the Partial Cabinet Solution bundles. The Exchange proposes to offer the Partial Cabinet Solution bundles beginning January 1, 2016.

Time Feeds

The proposed rule change would provide that Users [5] may purchase access to three time feeds, each of which provides a feed with the current time of day using one of three different time protocols: GPS Time Source, the Network Time Protocol feed (''NTP''), and Precision Timing Protocol (''PTP'').[6]

Time feeds are used to receive time and to synchronize clocks between computer systems or throughout a computer network. A User may opt to connect to a time feed for various reasons, including record keeping or measuring response times.[7] The proposed connectivity to time feeds would provide Users a convenient way to access time protocols.

The proposed change includes three time feeds. Global Positioning System (''GPS'') is a time and location system maintained by the United States government. The Exchange accesses the GPS Time Source feed through dedicated equipment and subscribing Users connect to the feed over dedicated cables. For the NTP and PTP time feeds, the Exchange routes the GPS data through dedicated equipment that reformats the GPS data into NTP and PTP.[8] Subscribing Users connect to PTP over dedicated cables and NTP over the Liquidity Center Network (''LCN''), a local area network available in the data center.

Currently, the Exchange's co-location services allow a User to request a physical cabinet to house its servers and other equipment in the data center. A User has the option of receiving an entire cabinet that is dedicated solely to that User (''dedicated cabinet'') or a partial cabinet available in increments of eight-rack units of space (''partial cabinet'').[9] Connectivity to all three time protocols would be available for dedicated cabinets. Due to technical limitations, connectivity to the NTP and PTP would be available for partial cabinets, but connectivity to GPS would not.[10]

The Exchange proposes to amend the Fee Schedules to reflect fees related to these services, as follows:

Connection to Time Protocol Feed	Network Time Protocol Feed (Note: LCN only)	$300 initial charge plus $100 monthly
	Precision Time Protocol	$1,000 initial charge plus $250 monthly
	GPS Time Source (Note: dedicated cabinets only).	$3,000 initial charge plus $400 monthly

Users that order the proposed time feed services will be subject to a 12-month minimum commitment, after which period they are subject to a 60-day rolling time period.[11]

Partial Cabinet Solution Bundles

The Exchange proposes to offer four Partial Cabinet Solution bundles intended to make it more cost effective for smaller Users to utilize co-location. These proposed Partial Cabinet Solution bundles would provide smaller Users a convenient way to create a colocation environment, by including in each

[4] The Exchange initially filed rule changes relating to its co-location services with the Securities and Exchange Commission (''Commission'') in 2010. *See* Securities Exchange Act Release No. 63275 (November 8, 2010), 75 FR 70048 (November 16, 2010) (SR–NYSEArca–2010–100) (the ''Original Co-location Filing''). The Exchange operates a data center in Mahwah, New Jersey (the ''data center'') from which it provides co-location services to Users.

[5] For purposes of the Exchange's co-location services, a ''User'' means any market participant that requests to receive co-location services directly from the Exchange, a ''Hosting User'' means a User that hosts a Hosted Customer in the User's co-location space, and a ''Hosted Customer'' means a customer of a Hosting User that is hosted in a Hosting User's co-location space. *See* Securities Exchange Act Release No. 76010 (September 29, 2015), 80 FR 60197 (October 5, 2015) (SR–NYSEArca–2015–82). As specified in the Fee Schedules, a User that incurs co-location fees for a particular co-location service pursuant thereto would not be subject to co-location fees for the same co-location service charged by the Exchange's affiliates New York Stock Exchange LLC and NYSE MKT LLC. *See* Securities Exchange Act Release No. 70173 (August 13, 2013), 78 FR 50459 (August 19, 2013) (SR–NYSEArca–2013–80).

[6] The time feeds are unrelated to trading on the Exchange or the Exchange's data feeds. A User does not require connectivity to a time feed to trade on the Exchange, and usage of a time feed has no effect on a User's orders going to, or trade data coming from, the Exchange.

[7] For example, a User may connect to a time feed for record keeping purposes if it uses that specific time protocol for all its activities, both inside and out of the data center.

[8] The reformatting equipment is programmed by the vendor to generate NTP and PTP time feeds that comply with industry standards. The Exchange does not program or manage the reformatting of the GPS data into NTP and PTP.

[9] *See* Original Co-location Filing, at 70049 and Securities Exchange Act Release No. 71130 (December 18, 2013), 78 FR 77765 (December 24, 2013) (SR–NYSEArca–2013–143) (notice of filing and immediate effectiveness of proposed rule change to offer partial cabinets).

[10] The Exchange does not propose to make connectivity to GPS available for partial cabinets because the proximity of the GPS and power connections into a partial cabinet would expose GPS to interference from the cable power connections, interfering with the delivery of the GPS data.

[11] The Exchange believes that the 12-month minimum period is common practice for colocation offerings. *See, e.g.,* Securities Exchange Act Release No. 68735 (January 25, 2013), 78 FR 6842 (January 31, 2013) (SR–NASDAQ–2012–119) (noting that NASDAQ represented that the lock-in feature ''is common practice for colocation offerings''). If a User upgrades a service (*i.e.,* goes from a 10 Gb to a 40 Gb LCN circuit), it will not be held to the minimum period for the first service, but will be subject to a 12-month minimum period for the upgraded service, starting from the date of the upgrade.

Partial Cabinet Solution bundle cabinet space, network access, fiber connections (''cross connects''), and the choice of either the NTP or PTP time feed. The Exchange expects that such Users would include those with minimal power or cabinet space demands and Users for which the costs attendant with having a dedicated cabinet or greater network connection bandwidth are too burdensome. The Exchange expects that the majority of Users that purchase a Partial Cabinet Solution bundle will not previously have been a User or Hosted Customer, but recognizes that it is possible that purchasing Users may include entities that otherwise would be Hosted Customers. The Exchange proposes to offer the Partial Cabinet Solution bundles beginning January 1, 2016.

As noted above, currently a User may opt to receive a partial cabinet available in increments of eight-rack units of space. Each partial cabinet is allocated up to two kilowatts (''kWs'') of power.

In addition, the Exchange offers Users access to two local area networks available in the data center: the LCN and the internet protocol (''IP'') network.[12] The Exchange offers 1 and 10 gigabit (''Gb'') IP network access, 1, 10, and 40 Gb LCN network access, and LCN 10 Gb LX network access.[13]

Users may use cross connects to connect cabinets within the data center, including between a User's cabinet and a non-User's equipment within the data center. For example, a User may utilize a cross connect with a non-User to connect to a carrier's equipment in order to access the carrier's network outside the data center.[14]

The Exchange proposes to offer four Partial Cabinet Solution bundles. Because the Partial Cabinet Solution bundles are intended to make it more cost effective for smaller Users to utilize co-location, the Exchange proposes only to provide access to a Partial Cabinet Solution bundle to a User that meets the following conditions: (1) The User purchases only one Partial Cabinet Solution bundle; (2) the User and its Affiliates[15] do not currently have a Partial Cabinet Solution bundle; and (3) after the purchase of the Partial Cabinet Solution bundle, the User, together with its Affiliates, will have an aggregate cabinet footprint of no more than 2 kW.[16] A User's aggregate cabinet footprint is the total kW of its cabinets, including both partial and dedicated cabinets, and a Hosted Customer's aggregate cabinet footprint is the total kW of the portion of the Hosting User's cabinet, whether partial or dedicated, allocated to such Hosted Customer.[17]

The Exchange proposes to aggregate the aggregate cabinet footprint of a User of a Partial Cabinet Solution bundle with the aggregate cabinet footprint of its Affiliates for purposes of determining whether the User has satisfied the conditions in order to avoid disparate treatment of Users that have divided their various business activities between separate corporate entities, including between a User and a Hosted Customer, as compared to Users that operate those business activities within a single corporate entity. Accordingly, the Exchange proposes that a User requesting a Partial Cabinet Solution bundle be required to represent to the Exchange (a) whether it has any Affiliates that are Users or Hosted Customers, and (b) that its aggregate cabinet footprint, together with the aggregate cabinet footprint of its Affiliates that are also Users or Hosted Customers and the cabinet footprint of the Partial Cabinet Solution bundle, will not exceed 2 kW. In addition, the User of a Partial Cabinet Solution bundle would be required to inform the Exchange immediately of any event that causes another User or Hosted Customer to become an Affiliate.[18] The Exchange proposes to revise the Fee Schedules accordingly.

If a User of a Partial Cabinet Solution bundle became Affiliated with one or more other Users or Hosted Customers and thereby no longer met the conditions for access to the Partial Cabinet Solution bundle, or if the User otherwise ceased to meet the conditions for access, the Exchange would no longer offer access to the Partial Cabinet Solution bundle to such User. Once the User ceased to meet the conditions for access to the Partial Cabinet Solution bundle, it would be charged for each of the services individually, at the price for each such service set out in the Fee Schedules. Such price change would be effective as of the date that the User ceased to meet the conditions.

The Exchange proposes that Users that purchase a Partial Cabinet Solution bundle would be charged a non-recurring initial charge (''NRC'') and a monthly recurring charge (''MRC'').[19] The Exchange proposes that Users that order a Partial Cabinet Solution bundle on or before December 31, 2016 would have their MRC reduced by 50% for the first 12 months.

The Exchange proposes to amend the Fee Schedules to reflect fees related to these new services, as follows:

[12] *See* Original Co-location Filing, at 70049 and Securities Exchange Act Release Nos. 74219 (February 6, 2015), 80 FR 7899 (February 12, 2015) (SR–NYSEArca–2015–03) (notice of filing and immediate effectiveness of proposed rule change to include IP network connections and fiber cross connects between a User's cabinet and a non-User's equipment) (''Release No. 74219'') and 70887 (November 15, 2013), 78 FR 69897 (November 21, 2013) (SR–NYSEArca–2013–123) (notice of filing and immediate effectiveness of proposed rule change to include LCN 10 Gb LX connection).

[13] The Exchange also proposes to provide 40 Gb IP network access. The 40 Gb IP network connection is expected to be available no later than April 15, 2016. The Exchange will announce the date that the 40 Gb IP network connection will be available through a customer notice. *See* Securities Exchange Act Release No. 76372 (November 5, 2015), 80 FR 70039 (November 12, 2015) (SR–NYSEArca–2015–105) (notice of filing and immediate effectiveness of proposed rule change to include IP 40 Gb network connections).

[14] *See* Release No. 74219, *supra* note 12.

[15] For purposes of the Partial Cabinet Solution bundles, an ''Affiliate'' of a User would be any other User or a Hosted Customer that is under 50% or greater common ownership or control of the first User.

[16] For example, a User with a 4 kW dedicated cabinet would not be eligible for a Partial Cabinet Solution bundle, as its aggregate cabinet footprint would be either 5 kW or 6 kW once a Partial Cabinet Solution bundle was added.

[17] The Exchange's subsidiary NYSE Arca Equities similarly aggregates eligible activity of member organization affiliates for purposes of charges or credits based on volume. *See* Securities Exchange Act Release No. 74604 (March 30, 2015), 80 FR 18270 (April 3, 2015) (SR–NYSEArca–2015–20), 80 FR 20043 (April 14, 2015) (correction). The threshold percentage used in the definition of ''affiliate'' for purposes of charges or credits based on volume is 75%. *Id.* The Exchange proposes a lower threshold in the present case in order to discourage any User from taking deliberate advantage of the proposed Partial Cabinet Solution bundle by setting up separate corporate entities to act as Users or Hosted Customers.

[18] The Exchange would review available information regarding the entities and may request additional information to verify the Affiliate status of a User or Hosted Customer. The Exchange would approve a request for a Partial Cabinet Solution bundle unless it determines that the certification is not accurate.

[19] A User that changes its Partial Cabinet Solution bundle would not be subject to a second NRC. Rather, it would pay the difference, if any, between the NRCs. For example, a User that buys an Option A Partial Cabinet Solution bundle would pay a $7,500 NRC. If it then opted to change to Option C, it would pay $2,500, *i.e.* the difference between the Option A and Option C NRCs of $7,500 and $10,000, respectively.

Type of service	Description	Amount of charge
Partial Cabinet Solution bundles (effective from January 1, 2016). Note: A User and its Affiliates are limited to one Partial Cabinet Solution bundle at a time. A User and its Affiliates must have an aggregate cabinet footprint of 2 kW or less to qualify for a Partial Cabinet Solution bundle.	Option A: 1 kW partial cabinet, 1 LCN connection (1 Gb), 1 IP network connection (1 Gb), 2 fiber cross connections and either the Network Time Protocol Feed or Precision Timing Protocol.	$7,500 initial charge per bundle plus monthly charge per bundle as follows: • For Users that order on or before December 31, 2016: $3,000 monthly for first 12 months of service, and $6,000 monthly thereafter. • For Users that order after December 31, 2016: $6,000 monthly.
	Option B: 2 kW partial cabinet, 1 LCN connection (1 Gb), 1 IP network connection (1 Gb), 2 fiber cross connections and either the Network Time Protocol Feed or Precision Timing Protocol.	$7,500 initial charge per bundle plus monthly charge per bundle as follows: • For Users that order on or before December 31, 2016: $3,500 monthly for first 12 months of service, and $7,000 monthly thereafter. • For Users that order after December 31, 2016: $7,000 monthly.
	Option C: 1 kW partial cabinet, 1 LCN connection (10 Gb), 1 IP network connection (10 Gb), 2 fiber cross connections and either the Network Time Protocol Feed or Precision Timing Protocol.	$10,000 initial charge per bundle plus monthly charge per bundle as follows: • For Users that order on or before December 31, 2016: $7,000 monthly for first 12 months of service, and $14,000 monthly thereafter. • For Users that order after December 31, 2016: $14,000 monthly.
	Option D: 2 kW partial cabinet, 1 LCN connection (10 Gb), 1 IP network connection (10 Gb), 2 fiber cross connections and either the Network Time Protocol Feed or Precision Timing Protocol.	$10,000 initial charge per bundle plus monthly charge per bundle as follows: • For Users that order on or before December 31, 2016: $7,500 monthly for first 12 months of service, and $15,000 monthly thereafter. • For Users that order after December 31, 2016: $15,000 monthly.

Each proposed Partial Cabinet Solution bundle is made up of a number of different services. If a User purchased each of the components of a Partial Cabinet Solution bundle, whether over several purchases or in one order, and met the conditions described above for access to the Partial Cabinet Solution bundle, the Exchange would automatically treat the User's services as a Partial Cabinet Solution bundle and, effective the date of installation of the final component, reduce the User's MRC to the MRC for the relevant bundle.[20]

Finally, the Exchange proposes to make non-substantive changes to the Fee Schedules to add subheadings under ''Co-Location Fees'' for ''Definitions'' and ''General Notes''. Definitions of aggregate cabinet footprint and Affiliate would be added under ''Definitions''. The existing note stating that a User that incurs co-location fees for a particular co-location service would not be subject to co-location fees for the same co-location service charged by the Exchange's affiliates would become note one under ''General Notes'' and the proposed provisions regarding aggregate cabinet footprints and what portion of an NRC, if any, a User would be subject to if it changed bundles would become note two.[21]

Users that purchase a proposed Partial Cabinet Solution bundle would not be subject to the 12-month minimum commitment, but rather would be subject to a 90-day commitment, after which period they would be subject to the 60-day rolling time period. As noted above, the Exchange anticipates that Users of the Partial Cabinet Solution bundles would include those with minimum power or cabinet space demands and Users for which the costs attendant with having a dedicated cabinet or greater network connection bandwidth are too burdensome. The Exchange proposes to have a reduced minimum commitment period for the Partial Cabinet Solution bundle to further reduce the cost commitment for such Users.

General

As is the case with all Exchange co-location arrangements, (i) neither a User nor any of the User's customers would be permitted to submit orders directly to the Exchange unless such User or customer is a member organization, a Sponsored Participant or an agent thereof (*e.g.,* a service bureau providing order entry services); (ii) use of the co-location services proposed herein would be completely voluntary and available to all Users on a non-discriminatory basis; [22] and (iii) a User would only incur one charge for the particular co-location service described herein, regardless of whether the User connects only to the Exchange or to the Exchange and one or both of its affiliates.[23]

The proposed change is not otherwise intended to address any other issues relating to co-location services and/or related fees, and the Exchange is not aware of any problems that Users would have in complying with the proposed change.

[20] The Exchange proposes to implement the proposed Partial Cabinet Solution bundle changes effective January 1, 2016. If as of that date a User already had each of the components of a Partial Cabinet Solution bundle and met the conditions described above for access to the Partial Cabinet Solution bundle, the Exchange would automatically treat the User's services as a Partial Cabinet Solution bundle and reduce the User's MRC to the MRC for the relevant bundle, effective January 1, 2016.

[21] *See* note 18, *supra.*

[22] As is currently the case, Users that receive co-location services from the Exchange will not receive any means of access to the Exchange's trading and execution systems that is separate from, or superior to, that of other Users. In this regard, all orders sent to the Exchange enter the Exchange's trading and execution systems through the same order gateway, regardless of whether the sender is co-located in the data center or not. In addition, co-located Users do not receive any market data or data service product that is not available to all Users, although Users that receive co-location services normally would expect reduced latencies in sending orders to, and receiving market data from, the Exchange.

[23] *See* SR–NYSEArca–2013–80, *supra* note 5 at 50459. The Exchange's affiliates have also submitted the same proposed rule change to propose the changes described herein. *See* SR–NYSE–2015–53 and SR–NYSEMKT–2015–89.

2. Statutory Basis

The Exchange believes that the proposed rule change is consistent with Section 6(b) of the Act,[24] in general, and furthers the objectives of Sections 6(b)(5) of the Act,[25] in particular, because it is designed to prevent fraudulent and manipulative acts and practices, to promote just and equitable principles of trade, to foster cooperation and coordination with persons engaged in regulating, clearing, settling, processing information with respect to, and facilitating transactions in securities, to remove impediments to, and perfect the mechanisms of, a free and open market and a national market system and, in general, to protect investors and the public interest and because it is not designed to permit unfair discrimination between customers, issuers, brokers, or dealers.

The Exchange believes that providing connectivity to time feeds is not designed to permit unfair discrimination between customers, issuers, brokers, or dealers because the service would offer connectivity to different time feed options, allowing a User that opts to connect to a time feed to select the time protocol that best suits its needs, helping it tailor its data center operations to the requirements of its business operations. The time feeds are unrelated to trading on the Exchange or the Exchange's data feeds. A User does not require connectivity to a time feed to trade on the Exchange, and usage of a time feed has no effect on a User's orders going to, or trade data coming from, the Exchange.

The Exchange believes that providing connectivity to GPS for dedicated cabinets but not partial cabinets and to NTP through the LCN but not the IP network is not designed to permit unfair discrimination between customers, issuers, brokers, or dealers because the Exchange proposes to offer connectivity to time feeds, including GPS and NTP, as a convenience to Users, and usage of a time feed has no effect on a User's orders going to, or trade data coming from, the Exchange. Regarding GPS, the proximity of GPS and power connections into a partial cabinet would expose GPS to interference from the cable power connections, interfering with the delivery of the GPS data, and so the Exchange is not able to offer connectivity to GPS for partial cabinets. A User that requires connectivity to GPS could opt to purchase a dedicated cabinet or become a Hosted Customer of a Hosting User with a dedicated cabinet. Regarding NTP, the Exchange has opted to offer the NTP only over the LCN due to a lack of demand for the NTP over the IP network. A User that requires connectivity to NTP could connect to the LCN.

The Exchange believes that the Partial Cabinet Solution bundles are not designed to permit unfair discrimination between customers, issuers, brokers, or dealers because the Partial Cabinet Solution bundles would offer four different Partial Cabinet Solution bundles with options with respect to cabinet footprint and network connections. Users that require other sizes or combinations of cabinets, network connections and cross connects could still request them.

The Exchange believes that its proposal would remove impediments to, and perfects the mechanisms of, a free and open market and a national market system and, in general, protects investors and the public interest because the proposed connectivity to time feeds would provide Users a convenient way to access time protocols. Having different time feed options would allow a User with a dedicated cabinet to select the time protocol that suits its needs, and for a User with a partial cabinet to select between the NTP and PTP.

In addition, the Exchange believes that its proposal would remove impediments to, and perfects the mechanisms of, a free and open market and a national market system and, in general, protects investors and the public interest because the proposed Partial Cabinet Solution bundles would make it more cost effective for Users that meet the conditions described above for access to the Partial Cabinet Solution bundle to utilize co-location by creating a convenient way to create a colocation environment, through four Partial Cabinet Solution bundles with options with respect to cabinet footprint and network connections. The Exchange expects that such Users would include those with minimal power or cabinet space demands and Users for which the costs attendant with having a dedicated cabinet or greater network connection bandwidth are too burdensome. Such Users may choose to pass on such cost savings to their customers. The Exchange expects that the majority of Users that purchase a Partial Cabinet Solution bundle will not previously have been a User or Hosted Customer, but recognizes that it is possible that purchasing Users may include entities that otherwise would be Hosted Customers.

The Exchange also believes that the proposed rule change is consistent with Section 6(b)(4) of the Act,[26] in particular, because it provides for the equitable allocation of reasonable dues, fees, and other charges among its member organizations, issuers and other persons using its facilities and does not unfairly discriminate between customers, issuers, brokers or dealers.

Overall, the Exchange believes that the proposed fees for the time feed connectivity and Partial Cabinet Solution bundles are reasonable because the Exchange proposes to offer the services as a convenience to Users, but in doing so will incur certain costs, including costs related to the data center facility, hardware and equipment and costs related to personnel required for initial installation and monitoring, support and maintenance of such services. The higher fee in connection with the GPS reflects the greater costs for its equipment, installation and maintenance in comparison with the other time feeds. The Exchange believes that submitting Users that order the proposed time feed services to a 12-month minimum commitment, after which period they would be subject a 60-day rolling time period, is reasonable, as it reflects the investment the Exchange incurs in order to provide the service. The Exchange believes that the 12-month minimum period is common practice for colocation offerings.

In addition, the Exchange believes that its proposal to limit access to Partial Cabinet Solution bundles to a User that meets the conditions described above, specifically, that (1) the User purchases only one Partial Cabinet Solution bundle, (2) the User and its Affiliates do not currently have a Partial Cabinet Solution bundle, and, (3) after the purchase of a Partial Cabinet Solution bundle, the User, together with its Affiliates, will have an aggregate cabinet footprint of no more than 2 kW, is reasonable, because the Partial Cabinet Solution bundles are intended to make it more cost effective for smaller Users to utilize co-location. All Users would be subject to the same limits on the number of Partial Cabinet Solution bundles and aggregate cabinet footprint. The Exchange believes that the proposal is reasonable because it establishes a manner for the Exchange to treat Users for purposes of assessing aggregate cabinet footprint. The provision is equitable because all Users seeking to purchase a Partial Cabinet Solution bundle would be subject to the same parameters. The Exchange further notes that the proposal would serve to reduce any potential for confusion on

[24] 15 U.S.C. 78f(b).

[25] 15 U.S.C. 78f(b)(5).

[26] 15 U.S.C. 78f(b)(4).

how cabinet footprint can be aggregated or what entities would constitute Affiliates.

The Exchange believes that, by aggregating the aggregate cabinet footprint of a User with the aggregate cabinet footprint of its Affiliates for purposes of determining whether the User has satisfied the conditions, the proposed rule change avoids disparate treatment of Users that have divided their various business activities between separate corporate entities, including between a User and a Hosted Customer, as compared to Users that operate those business activities within a single corporate entity. The Exchange believes that setting the common ownership or control threshold in the definition of Affiliates at 50% is reasonable because it will discourage any User from taking deliberate advantage of the proposed Partial Cabinet Solution bundle by setting up separate corporate entities to act as Users or Hosted Customers.

The Exchange believes that it is reasonable that Users that order a Partial Cabinet Solution bundle on or before December 31, 2016 would have their MRC reduced by 50% for the first 12 months because the Partial Cabinet Solution bundles are a new service, and so it is reasonable to offer such reduction as an incentive to Users to utilize the new service. Similarly, the Exchange believes that submitting Users that purchase the propose Partial Cabinet Solution bundle to a 90-day commitment, rather than the 12-month minimum commitment, after which period they would be subject to the 60-day rolling time period, is reasonable. As noted above, the Exchange anticipates that Users of the Partial Cabinet Solution bundles would include those with minimum power or cabinet space demands and Users for which the costs attendant with having a dedicated cabinet or greater network connection bandwidth are too burdensome. The Exchange believes that it is reasonable to have a reduced minimum commitment period for the Partial Cabinet Solution bundle to further reduce the cost commitment for such Users as an incentive to Users to utilize the new service.

The Exchange believes that it is reasonable not to charge a User that changes its Partial Cabinet Solution bundle a second NRC, but instead charge the difference, if any, between the NRCs, because the cost to the Exchange of modifying the service to move a User to a different Partial Cabinet Solution bundle is lower than the cost of the initial installation of a Partial Cabinet Solution bundle.

The Exchange also believes that the services and fees proposed herein for Partial Cabinet Solution bundles are reasonable because if a User purchased each of the components of a Partial Cabinet Solution bundle, whether over several purchases or in one order, and met the conditions described above for access to the Partial Cabinet Solution bundle, the Exchange would automatically treat the User's services as a Partial Cabinet Solution bundle and, effective the date of installation of the final component, reduce the User's MRC to the MRC for the relevant bundle.

The Exchange believes that the proposed change to provide Users access to time feeds is equitable and not unfairly discriminatory because it will result in fees being charged only to Users that voluntarily select to receive the corresponding services and because those services will be available to all Users. Furthermore, the Exchange believes that the services and fees proposed herein are not unfairly discriminatory and are equitably allocated because, in addition to the connectivity to time feeds being completely voluntary, it is available to all Users on an equal basis (*i.e.,* the same connectivity to time feed products and services is available to all Users, and the same conditions described above for access to the Partial Cabinet Solution bundles would apply to all Users). All Users that voluntarily select connectivity to one or more of the proposed time feeds would be charged the same amount for the same services.

The Exchange believes that the proposed change to provide Partial Cabinet Solution bundles is equitable and not unfairly discriminatory because it would be available to all Users that meet the conditions described above for access to the Partial Cabinet Solution bundle and would result in fees being charged only to such Users that voluntarily select to receive the corresponding service.

The Exchange believes that the proposed change to provide Partial Cabinet Solution bundles provides for the equitable allocation of reasonable dues, fees, and other charges among its members, issuers and other persons using its facilities. As previously stated, the proposal would make it more cost effective for Users that meet the conditions described above for access to the Partial Cabinet Solution bundle to utilize co-location. While the Exchange expects that the majority of Users that purchase a Partial Cabinet Solution bundle will not previously have been a User or Hosted Customer, it recognizes that it is possible that purchasing Users may include entities that otherwise would be Hosted Customers. However, it notes that being a Hosted Customer and being a User with a Partial Cabinet Solution bundle are not fungible. A Hosting User manages the service provided to the Hosted Customer, which services may include, for example, supporting the Hosted Customer's technology, whether hardware or software. The Hosted Customer has no relationship with the Exchange. A User with a Partial Cabinet Solution bundle, by contrast, is responsible for supporting its own technology and is in a direct contractual relationship with the Exchange. Providing entities with the additional option of the Partial Cabinet Solution bundle will allow them to select the relationship and type of service that better corresponds to their needs and resources.

Furthermore, the Exchange believes that the Partial Cabinet Solution bundle services and fees proposed herein are not unfairly discriminatory and are equitably allocated because, in addition to the services being completely voluntary, they are available to all Users on an equal basis (*i.e.,* the same products and services are available to all Users, and the same conditions described above for access to the Partial Cabinet Solution bundles would apply to all Users). All Users that voluntarily select the proposed Partial Cabinet Solution bundle service would be subject to the same limits on the number of Partial Cabinet Solution bundles and aggregate cabinet footprint. The Exchange believes that, by aggregating the aggregate cabinet footprint of a User with the aggregate cabinet footprint of its Affiliates for purposes of determining whether the User has satisfied the conditions, the proposed limit on aggregate cabinet footprint avoids disparate treatment of Users that have divided their various business activities between separate corporate entities, including between a User and a Hosted Customer, as compared to Users that operate those business activities within a single corporate entity. Finally, all Users that order a bundle on or before December 31, 2016 would have their MRC reduced by 50% for the first 12 months.

The Exchange believes that it is equitable and not unfairly discriminatory to not charge a User that changes its Partial Cabinet Solution bundle a second NRC, but instead charge the difference, if any, between the NRCs, because the cost to the Exchange of modifying the service to move a User to a different Partial Cabinet Solution bundle is lower than the cost of the initial installation of a Partial Cabinet Solution bundle.

The Exchange also believes that the services and fees proposed herein for Partial Cabinet Solution bundles are not unfairly discriminatory and are equitably allocated because if a User purchased each of the components of a Partial Cabinet Solution bundle, whether over several purchases or in one order, and met the conditions described above for access to the Partial Cabinet Solution bundle, the Exchange would automatically treat the User's services as a Partial Cabinet Solution bundle and, effective the date of installation of the final component, reduce the User's MRC to the MRC for the relevant bundle.

For the reasons above, the proposed changes do not unfairly discriminate between or among market participants that are otherwise capable of satisfying any applicable co-location fees, requirements, terms and conditions established from time to time by the Exchange.

Finally, the Exchange believes that it is subject to significant competitive forces, as described below in the Exchange's statement regarding the burden on competition.

For these reasons, the Exchange believes that the proposal is consistent with the Act.

B. Self-Regulatory Organization's Statement on Burden on Competition

In accordance with Section 6(b)(8) of the Act,[27] the Exchange believes that the proposed rule change will not impose any burden on competition that is not necessary or appropriate in furtherance of the purposes of the Act because, in addition to the proposed services being completely voluntary, they are available to all Users on an equal basis (*i.e.* the same products and services are available to all Users, and the same conditions described above for access to the Partial Cabinet Solution bundles would apply to all Users).

The Exchange believes that providing Users with connectivity to time feeds will not impose any burden on competition that is not necessary or appropriate in furtherance of the purposes of the Act because such connectivity satisfies User demand for a convenient way to access time protocols Having connectivity to different time feed options would allow a User with a dedicated cabinet to select the time protocol that best suits its needs, and for a User with a partial cabinet to select between the NTP and PTP, helping Users tailor their data center operations to the requirements of their business operations. In addition, the Exchange believes that providing connectivity to GPS for dedicated cabinets but not partial cabinets and to NTP through the LCN but not the IP network will not impose any burden on competition that is not necessary or appropriate in furtherance of the purposes of the Act because the Exchange proposes to offer connectivity to time feeds, including GPS and NTP, as a convenience to Users, and usage of a time feed has no effect on a User's orders going to, or trade data coming from, the Exchange.

The Exchange believes that allowing Users to purchase Partial Cabinet Solution bundles will not impose any burden on competition that is not necessary or appropriate in furtherance of the purposes of the Act because such access will satisfy User demand for cost effective options for smaller Users that choose to utilize co-location. All Users that meet the conditions described above for access to the Partial Cabinet Solution bundle would be subject to the same limits on the number of Partial Cabinet Solution bundles and aggregate cabinet footprint, all Users that order a bundle on or before December 31, 2016 would have their MRC reduced by 50% for the first 12 months, and all Users that change Partial Cabinet Solution bundles would not be charged a second NRC, but instead charged the difference, if any, between the NRCs.

The Exchange believes that allowing Users to purchase Partial Cabinet Solution bundles will not impose any burden on competition that is not necessary or appropriate in furtherance of the purposes of the Act because, as previously stated, the proposal would make it more cost effective for Users that meet the conditions described above for access to the Partial Cabinet Solution bundle to utilize co-location. While the Exchange expects that the majority of Users that purchase a Partial Cabinet Solution bundle will not previously have been a User or Hosted Customer, it recognizes that it is possible that purchasing Users may include entities that otherwise would be Hosted Customers. However, it notes that being a Hosted Customer and being a User with a Partial Cabinet Solution bundle are not fungible. A Hosting User manages the service provided to the Hosted Customer, which services may include, for example, supporting the Hosted Customer's technology, whether hardware or software. The Hosted Customer has no relationship with the Exchange. A User with a Partial Cabinet Solution bundle, by contrast, is responsible for supporting its own technology and is in a direct contractual relationship with the Exchange. Providing entities with the additional option of the Partial Cabinet Solution bundle will allow them to select the relationship and type of service that better corresponds to their needs and resources.

The proposed changes will also enhance competition by making it more cost effective for Users that meet the conditions described above for access to the Partial Cabinet Solution bundle to utilize co-location by creating a convenient way to create a colocation environment, through Partial Cabinet Solution bundles with options with respect to cabinet footprint and network connections. Such Users may choose to pass on such cost savings to their customers.

Finally, the Exchange notes that it operates in a highly competitive market in which market participants can readily favor competing venues if they deem fee levels at a particular venue to be excessive. In such an environment, the Exchange must continually review, and consider adjusting, its services and related fees and credits to remain competitive with other exchanges. For the reasons described above, the Exchange believes that the proposed rule change reflects this competitive environment.

C. Self-Regulatory Organization's Statement on Comments on the Proposed Rule Change Received From Members, Participants, or Others

No written comments were solicited or received with respect to the proposed rule change.

III. Date of Effectiveness of the Proposed Rule Change and Timing for Commission Action

Within 45 days of the date of publication of this notice in the **Federal Register** or within such longer period (i) as the Commission may designate up to 90 days of such date if it finds such longer period to be appropriate and publishes its reasons for so finding or (ii) as to which the Exchange consents, the Commission shall: (a) by order approve or disapprove such proposed rule change, or (b) institute proceedings to determine whether the proposed rule change should be disapproved.

IV. Solicitation of Comments

Interested persons are invited to submit written data, views, and arguments concerning the foregoing, including whether the proposed rule change is consistent with the Act. Comments may be submitted by any of the following methods:

[27] 15 U.S.C. 78f(b)(8).

Electronic Comments

- Use the Commission's Internet comment form (*http://www.sec.gov/rules/sro.shtml*); or
- Send an email to *rule-comments@sec.gov.* Please include File No. SR–NYSEARCA–2015–102 on the subject line.

Paper Comments

- Send paper comments in triplicate to Secretary, Securities and Exchange Commission, 100 F Street NE., Washington, DC 20549–1090.

All submissions should refer to File No. SR–NYSEARCA–2015–102. This file number should be included on the subject line if email is used. To help the Commission process and review your comments more efficiently, please use only one method. The Commission will post all comments on the Commission's Internet Web site (*http://www.sec.gov/rules/sro.shtml*). Copies of the submission, all subsequent amendments, all written statements with respect to the proposed rule change that are filed with the Commission, and all written communications relating to the proposed rule change between the Commission and any person, other than those that may be withheld from the public in accordance with the provisions of 5 U.S.C. 552, will be available for Web site viewing and printing in the Commission's Public Reference Room, 100 F Street NE., Washington, DC 20549 on official business days between the hours of 10:00 a.m. and 3:00 p.m. Copies of such filing also will be available for inspection and copying at the principal office of the Exchange. All comments received will be posted without change; the Commission does not edit personal identifying information from submissions. You should submit only information that you wish to make available publicly. All submissions should refer to File No. SR–NYSEARCA–2015–102, and should be submitted on or before January 6, 2016.

For the Commission, by the Division of Trading and Markets, pursuant to delegated authority.[28]

Brent J. Fields,

Secretary.

[FR Doc. 2015–31578 Filed 12–15–15; 8:45 am]

BILLING CODE 8011–01–P

[28] 17 CFR 200.30–3(a)(12).

SMALL BUSINESS ADMINISTRATION

[Disaster Declaration #14549 and #14550]

Texas Disaster Number TX–00461

AGENCY: U.S. Small Business Administration.

ACTION: Amendment 1.

SUMMARY: This is an amendment of the Presidential declaration of a major disaster for the State of Texas (FEMA–4245–DR), dated 11/25/2015.

Incident: Severe Storms, Tornadoes, Straight-line Winds, and Flooding.

Incident Period: 10/22/2015 through 10/31/2015.

Effective Date: 12/09/2015.

Physical Loan Application Deadline Date: 01/25/2016.

EIDL Loan Application Deadline Date: 08/25/2016.

ADDRESSES: Submit completed loan applications to: U.S. Small Business Administration, Processing and Disbursement Center, 14925 Kingsport Road, Fort Worth, TX 76155.

FOR FURTHER INFORMATION CONTACT: A. Escobar, Office of Disaster Assistance, U.S. Small Business Administration, 409 3rd Street SW., Suite 6050, Washington, DC 20416.

SUPPLEMENTARY INFORMATION: The notice of the Presidential disaster declaration for the State of Texas, dated 11/25/2015 is hereby amended to include the following areas as adversely affected by the disaster:

Primary Counties: (Physical Damage and Economic Injury Loans):
Cameron.

All counties contiguous to the above named primary county have previously been declared.

All other information in the original declaration remains unchanged.

(Catalog of Federal Domestic Assistance Numbers 59008)

Lisa Lopez-Suarez,

Acting Associate Administrator for Disaster Assistance.

[FR Doc. 2015–31588 Filed 12–15–15; 8:45 am]

BILLING CODE 8025–01–P

SMALL BUSINESS ADMINISTRATION

[Disaster Declaration #14573 and #14574]

Maryland Disaster #MD–00029

AGENCY: U.S. Small Business Administration.

ACTION: Notice.

SUMMARY: This is a notice of an Administrative declaration of a disaster for the State of Maryland dated 12/09/2015.

Incident: Heavy rains and flooding.

Incident Period: 09/29/2015.

Effective Date: 12/09/2015.

Physical Loan Application Deadline Date: 02/08/2016.

Economic Injury (EIDL) Loan Application Deadline Date: 09/09/2016.

ADDRESSES: Submit completed loan applications to: U.S. Small Business Administration, Processing and Disbursement Center, 14925 Kingsport Road, Fort Worth, TX 76155.

FOR FURTHER INFORMATION CONTACT: A. Escobar, Office of Disaster Assistance, U.S. Small Business Administration, 409 3rd Street SW., Suite 6050, Washington, DC 20416.

SUPPLEMENTARY INFORMATION: Notice is hereby given that as a result of the Administrator's disaster declaration, applications for disaster loans may be filed at the address listed above or other locally announced locations.

The following areas have been determined to be adversely affected by the disaster:

Primary Counties: Frederick.

Contiguous Counties:

Maryland: Carroll, Howard, Montgomery, Washington.

Pennsylvania: Adams, Franklin.

Virginia: Loudoun.

The Interest Rates are:

	Percent
For Physical Damage:	
Homeowners With Credit Available Elsewhere	3.750
Homeowners Without Credit Available Elsewhere	1.875
Businesses With Credit Available Elsewhere	6.000
Businesses Without Credit Available Elsewhere	4.000
Non-Profit Organizations With Credit Available Elsewhere	2.625
Non-Profit Organizations Without Credit Available Elsewhere	2.625
For Economic Injury:	
Businesses & Small Agricultural Cooperatives Without Credit Available Elsewhere	4.000
Non-Profit Organizations Without Credit Available Elsewhere	2.625

The number assigned to this disaster for physical damage is 14573 6 and for economic injury is 14574 0.

The States which received an EIDL Declaration # are Maryland, Pennsylvania, Virginia.

(Catalog of Federal Domestic Assistance Numbers 59002 and 59008)

Dated: December 9, 2015.

Maria Contreras-Sweet,

Administrator.

[FR Doc. 2015–31587 Filed 12–15–15; 8:45 am]

BILLING CODE 8025–01–P

DEPARTMENT OF STATE

[Public Notice: 9386]

Culturally Significant Object Imported for Exhibition Determinations: ''Kamakura: Realism and Spirituality in the Sculpture of Japan'' Exhibition

SUMMARY: Notice is hereby given of the following determinations: Pursuant to the authority vested in me by the Act of October 19, 1965 (79 Stat. 985; 22 U.S.C. 2459), Executive Order 12047 of March 27, 1978, the Foreign Affairs Reform and Restructuring Act of 1998 (112 Stat. 2681, *et seq.;* 22 U.S.C. 6501 note, *et seq.*), Delegation of Authority No. 234 of October 1, 1999, Delegation of Authority No. 236–3 of August 28, 2000 (and, as appropriate, Delegation of Authority No. 257 of April 15, 2003), I hereby determine that the object to be included in the exhibition ''Kamakura: Realism and Spirituality in the Sculpture of Japan,'' imported from abroad for temporary exhibition within the United States, is of cultural significance. The object is imported pursuant to a loan agreement with the foreign owner or custodian. I also determine that the exhibition or display of the exhibit object at the Asia Society Museum, New York, New York, from on or about February 9, 2016, until on or about May 8, 2016, and at possible additional exhibitions or venues yet to be determined, is in the national interest. I have ordered that Public Notice of these Determinations be published in the **Federal Register**.

FOR FURTHER INFORMATION CONTACT: For further information, including a description of the imported object, contact the Office of Public Diplomacy and Public Affairs in the Office of the Legal Adviser, U.S. Department of State (telephone: 202–632–6471; email: *section2459@state.gov*). The mailing address is U.S. Department of State, L/PD, SA–5, Suite 5H03, Washington, DC 20522–0505.

Dated: December 4, 2015.

Kelly Keiderling,

Principal Deputy Assistant Secretary, Bureau of Educational and Cultural Affairs, Department of State.

[FR Doc. 2015–31663 Filed 12–15–15; 8:45 am]

BILLING CODE 4710–05–P

DEPARTMENT OF STATE

[Public Notice: 9383]

Culturally Significant Objects Imported for Exhibition Determinations: ''Van Dyck: The Anatomy of Portraiture'' Exhibition

SUMMARY: Notice is hereby given of the following determinations: Pursuant to the authority vested in me by the Act of October 19, 1965 (79 Stat. 985; 22 U.S.C. 2459), Executive Order 12047 of March 27, 1978, the Foreign Affairs Reform and Restructuring Act of 1998 (112 Stat. 2681, *et seq.;* 22 U.S.C. 6501 note, *et seq.*), Delegation of Authority No. 234 of October 1, 1999, Delegation of Authority No. 236–3 of August 28, 2000 (and, as appropriate, Delegation of Authority No. 257 of April 15, 2003), I hereby determine that the objects to be included in the exhibition ''Van Dyck: The Anatomy of Portraiture,'' imported from abroad for temporary exhibition within the United States, are of cultural significance. The objects are imported pursuant to loan agreements with the foreign owners or custodians. I also determine that the exhibition or display of the exhibit objects at The Frick Collection, New York, New York, from on about March 2, 2016, until on or about June 5, 2016, and at possible additional exhibitions or venues yet to be determined, is in the national interest. I have ordered that Public Notice of these Determinations be published in the **Federal Register**.

FOR FURTHER INFORMATION CONTACT: For further information, including a list of the imported objects, contact the Office of Public Diplomacy and Public Affairs in the Office of the Legal Adviser, U.S. Department of State (telephone: 202–632–6471; email: *section2459@state.gov*). The mailing address is U.S. Department of State, L/PD, SA–5, Suite 5H03, Washington, DC 20522–0505.

Dated: December 10, 2015.

Kelly Keiderling,

Principal Deputy Assistant Secretary, Bureau of Educational and Cultural Affairs, Department of State.

[FR Doc. 2015–31675 Filed 12–15–15; 8:45 am]

BILLING CODE 4710–05–P

DEPARTMENT OF STATE

[Public Notice: 9387]

Culturally Significant Objects Imported for Exhibition Determinations: ''Visiting Masterpieces: Pairing Picassos'' Exhibition

SUMMARY: Notice is hereby given of the following determinations: Pursuant to the authority vested in me by the Act of October 19, 1965 (79 Stat. 985; 22 U.S.C. 2459), Executive Order 12047 of March 27, 1978, the Foreign Affairs Reform and Restructuring Act of 1998 (112 Stat. 2681, *et seq.;* 22 U.S.C. 6501 note, *et seq.*), Delegation of Authority No. 234 of October 1, 1999, Delegation of Authority No. 236–3 of August 28, 2000 (and, as appropriate, Delegation of Authority No. 257 of April 15, 2003), I hereby determine that the objects to be included in the exhibition ''Visiting Masterpieces: Pairing Picassos,'' imported from abroad for temporary exhibition within the United States, are of cultural significance. The objects are imported pursuant to a loan agreement with the foreign owner or custodian. I also determine that the exhibition or display of the exhibit objects at the Museum of Fine Arts, Boston, Boston, Massachusetts, from on or about February 13, 2016, until on or about June 26, 2016, and at possible additional exhibitions or venues yet to be determined, is in the national interest. I have ordered that Public Notice of these Determinations be published in the **Federal Register**.

FOR FURTHER INFORMATION CONTACT: For further information, including a list of the imported objects, contact the Office of Public Diplomacy and Public Affairs in the Office of the Legal Adviser, U.S. Department of State (telephone: 202–632–6471; email: *section2459@state.gov*). The mailing address is U.S. Department of State, L/PD, SA–5, Suite 5H03, Washington, DC 20522–0505.

Dated: December 4, 2015.

Kelly Keiderling,

Principal Deputy Assistant Secretary, Bureau of Educational and Cultural Affairs, Department of State.

[FR Doc. 2015–31673 Filed 12–15–15; 8:45 am]

BILLING CODE 4710–05–P

DEPARTMENT OF STATE

[Public Notice: 9385]

Culturally Significant Objects Imported for Exhibition Determinations: ''Munch and Expressionism'' Exhibition

SUMMARY: Notice is hereby given of the following determinations: Pursuant to the authority vested in me by the Act of October 19, 1965 (79 Stat. 985; 22 U.S.C. 2459), Executive Order 12047 of March 27, 1978, the Foreign Affairs Reform and Restructuring Act of 1998 (112 Stat. 2681, *et seq.;* 22 U.S.C. 6501 note, *et seq.*), Delegation of Authority No. 234 of October 1, 1999, Delegation of Authority No. 236–3 of August 28, 2000 (and, as appropriate, Delegation of Authority No.

257 of April 15, 2003), I hereby determine that the objects to be included in the exhibition ''Munch and Expressionism,'' imported from abroad for temporary exhibition within the United States, are of cultural significance. The objects are imported pursuant to loan agreements with the foreign owners or custodians. I also determine that the exhibition or display of the exhibit objects at the Neue Galerie New York, New York, New York, from on about February 18, 2016, until on or about May 13, 2016, and at possible additional exhibitions or venues yet to be determined, is in the national interest. I have ordered that Public Notice of these Determinations be published in the **Federal Register**.

FOR FURTHER INFORMATION CONTACT: For further information, including a list of the imported objects, contact the Office of Public Diplomacy and Public Affairs in the Office of the Legal Adviser, U.S. Department of State (telephone: 202–632–6471; email: *section2459@state.gov*). The mailing address is U.S. Department of State, L/PD, SA–5, Suite 5H03, Washington, DC 20522–0505.

Dated: December 4, 2015.

Kelly Keiderling,

Principal Deputy Assistant Secretary, Bureau of Educational and Cultural Affairs, Department of State.

[FR Doc. 2015–31668 Filed 12–15–15; 8:45 am]

BILLING CODE 4710–05–P

DEPARTMENT OF STATE

[Public Notice: 9384]

Culturally Significant Objects Imported for Exhibition Determinations: ''Van Gogh's Bedrooms'' Exhibition

SUMMARY: Notice is hereby given of the following determinations: Pursuant to the authority vested in me by the Act of October 19, 1965 (79 Stat. 985; 22 U.S.C. 2459), Executive Order 12047 of March 27, 1978, the Foreign Affairs Reform and Restructuring Act of 1998 (112 Stat. 2681, *et seq.;* 22 U.S.C. 6501 note, *et seq.*), Delegation of Authority No. 234 of October 1, 1999, Delegation of Authority No. 236–3 of August 28, 2000 (and, as appropriate, Delegation of Authority No. 257 of April 15, 2003), I hereby determine that the objects to be included in the exhibition ''Van Gogh's Bedrooms,'' imported from abroad for temporary exhibition within the United States, are of cultural significance. The objects are imported pursuant to loan agreements with the foreign owners or custodians. I also determine that the exhibition or display of the exhibit objects at The Art Institute of Chicago, Chicago, Illinois, from on or about February 14, 2016, until on or about May 10, 2016, and at possible additional exhibitions or venues yet to be determined, is in the national interest. I have ordered that Public Notice of these Determinations be published in the **Federal Register**.

FOR FURTHER INFORMATION CONTACT: For further information, including a list of the imported objects, contact the Office of Public Diplomacy and Public Affairs in the Office of the Legal Adviser, U.S. Department of State (telephone: 202–632–6471; email: *section2459@state.gov*). The mailing address is U.S. Department of State, L/PD, SA–5, Suite 5H03, Washington, DC 20522–0505.

Dated: December 4, 2015.

Kelly Keiderling,

Principal Deputy Assistant Secretary, Bureau of Educational and Cultural Affairs, Department of State.

[FR Doc. 2015–31666 Filed 12–15–15; 8:45 am]

BILLING CODE 4710–05–P

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

Agency Information Collection Activities: Requests for Comments; Clearance of Renewed Approval of Information Collection: Airport Grant Program

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Notice and request for comments.

SUMMARY: In accordance with the Paperwork Reduction Act of 1995, FAA invites public comments about our intention to request the Office of Management and Budget (OMB) approval to revise a previously approved information collection. The FAA collects data from airport sponsors and planning agencies to determine eligibility, and to ensure proper use of Federal Funds and project accomplishment for the Airports Grants Program.

DATES: Written comments should be submitted by February 16, 2016.

ADDRESSES: Send comments to the FAA at the following address: Ronda Thompson, Room 441, Federal Aviation Administration, ASP–110, 950 L'Enfant Plaza SW., Washington, DC 20024.

Public Comments Invited: You are asked to comment on any aspect of this information collection, including (a) Whether the proposed collection of information is necessary for FAA's performance; (b) the accuracy of the estimated burden; (c) ways for FAA to enhance the quality, utility and clarity of the information collection; and (d) ways that the burden could be minimized without reducing the quality of the collected information. The agency will summarize and/or include your comments in the request for OMB's clearance of this information collection.

FOR FURTHER INFORMATION CONTACT: Ronda Thompson at (202) 267–1416, or by email at: *Ronda.Thompson@faa.gov.*

SUPPLEMENTARY INFORMATION:

OMB Control Number: 2120–0569.

Title: Airport Grants Program.

Form Numbers: FAA Forms 5100–100, 5100–101, 5100–108, 5100–125, 5100–126, 5370–1, 5100–110, 5100–128, 5100–129, 5100–130, 5100–131, 5100–132, 5100–133, 5100–134, 5100–135, 5100–136, 5100–137, 5100–138, 5100–139, 5100–140, 5100–141, 5100–142.

Type of Review: Revision of an information collection.

Background Codification of Certain U.S. Transportation Laws at 49 U.S.C., repealed the Airport and Airway Improvement Act of 1982, as amended, and the Aviation Safety and Noise Abatement Act of 1979, as amended, and re-codified them without substantive change at Title 49, U.S.C., which is referred to as the ''Act''. The Act provides funding for airport planning and development projects at airports included in the National Plan of Integrated Airport Systems. The Act also authorizes funds for noise compatibility planning and to carry out noise compatibility programs. The information required by this program is necessary to protect the Federal interest in safety, efficiency, and utility of the Airport. Data is collected to meet report requirements of 2 CFR part 200 for certifications and representations, financial management and performance measurement.

Respondents: Approximately 12,607 applicants.

Frequency: Information is collected on occasion.

Estimated Average Burden per Response: 9 hours.

Estimated Total Annual Burden: 117,699 hours.

Issued in Washington, DC, on December 9, 2015.

Ronda Thompson,

FAA Information Collection Clearance Officer, Performance, Policy, and Records Management Branch, ASP–110.

[FR Doc. 2015–31602 Filed 12–15–15; 8:45 am]

BILLING CODE 4910–13–P

DEPARTMENT OF TRANSPORTATION

National Highway Traffic Safety Administration

[Docket No. NHTSA–2015–0071]

Reports, Forms, and Recordkeeping Requirements

AGENCY: National Highway Traffic Safety Administration (NHTSA), Department of Transportation.

ACTION: Request for public comment on proposed collection of information.

SUMMARY: In compliance with the Paperwork Reduction Act of 1995 (44 U.S.C. 3501 *et seq.*), this notice announces that the Information Collection Request (ICR) abstracted below is being forwarded to the Office of Management and Budget (OMB) for review and comments.

DATES: Comments must be received on or before January 15, 2016.

ADDRESSES: Send comments to the Office of Information and Regulatory Affairs, Office of Management and Budget, 725–17th Street NW., Washington, DC 20503, Attention: NHTSA Desk Officer.

FOR FURTHER INFORMATION CONTACT: For additional information or access to background documents, contact Timothy M. Pickrell, NHTSA, 1200 New Jersey Avenue SE., W55–320, NVS–421,Washington, DC 20590. Mr. Pickrell's telephone number is (202) 366–2903. Please identify the relevant collection of information by referring to its OMB Control Number.

SUPPLEMENTARY INFORMATION: Before a Federal agency can collect certain information from the public, it must receive approval from the Office of Management and Budget (OMB). In compliance with these requirements, this notice announces that the following information collection request has been forwarded to OMB. A **Federal Register** Notice soliciting comments on the following information collection was published on July 30, 2015 (Volume 80, Number 146; Pages 45585–86). The agency received no comments on the 60 day notice.

Title: The National Survey on the Use of Booster Seats.

OMB Control Number: 2127–0644.

Affected Public: Motorists in passenger vehicles at gas stations, fast food restaurants, and other types of sites frequented by children during the time in which the survey is conducted.

Form Number: NHTSA Form 1010.

Abstract: The National Survey of the Use of Booster Seats is being conducted to respond to the Section 14(i) of the Transportation Recall Enhancement, Accountability, and Documentation (TREAD) Act of 2000. The act directs the Department of Transportation to reduce the deaths and injuries among children in the 4 to 8 year old age group that are caused by failure to use a booster seat by 25%. Conducting the National Survey of the Use of Booster Seats provides the Department with invaluable information on who is and is not using booster seats, helping the Department better direct its outreach programs to ensure that children are protected to the greatest degree possible when they ride in motor vehicles. The OMB approval for this survey is scheduled to expire on 1/31/16. NHTSA seeks an extension to this approval in order to obtain this important survey data, save more children and help to comply with the TREAD Act requirement.

Estimated Annual Burden: 320 hours.

Estimated Number of Respondents: Approximately 4,800 adult motorists in passenger vehicles at gas stations, fast food restaurants, and other types of sites frequented by children during the time in which the survey is conducted.

Comments are invited on: whether the proposed collection of information is necessary for the proper performance of the functions of the Department, including whether the information will have practical utility; the accuracy of the Department's estimate of the burden of the proposed information collection; ways to enhance the quality, utility and clarity of the information to be collected; and ways to minimize the burden of the collection of information on respondents, including the use of automated collection techniques or other forms of information technology.

Terry Shelton,

Associate Administrator, National Center for Statistics and Analysis.

[FR Doc. 2015–31633 Filed 12–15–15; 8:45 am]

BILLING CODE 4910–59–P

DEPARTMENT OF THE TREASURY

Office of the Comptroller of the Currency

Agency Information Collection Activities: Information Collection Renewal; Submission for Review; FFIEC Cybersecurity Assessment Tool

AGENCY: Office of the Comptroller of the Currency (OCC), Treasury.

ACTION: Notice and request for comment.

SUMMARY: The OCC, the Board of Governors of the Federal Reserve System (Board), the Federal Deposit Insurance Corporation (FDIC), and the National Credit Union Administration (NCUA) (collectively, the Agencies), as part of their continuing effort to reduce paperwork and respondent burden, invite the general public and other Federal agencies to comment on a continuing information collection, as required by the Paperwork Reduction Act of 1995 (PRA).

In accordance with the requirements of the PRA, the Agencies may not conduct or sponsor, and the respondent is not required to respond to, an information collection unless it displays a currently valid Office of Management and Budget (OMB) control number.

The OCC is soliciting comment on behalf of the Agencies concerning renewal of the information collection titled ''FFIEC Cybersecurity Assessment Tool'' (''Assessment''). The OCC also is giving notice that it has sent the collection to OMB for review.

DATES: Comments must be received by January 15, 2016.

ADDRESSES: Because paper mail in the Washington, DC area and at the OCC is subject to delay, commenters are encouraged to submit comments by email, if possible. Comments may be sent to: Legislative and Regulatory Activities Division, Office of the Comptroller of the Currency, Attention: 1557–0328, 400 7th Street SW., Suite 3E–218, Mail Stop 9W–11, Washington, DC 20219. In addition, comments may be sent by fax to (571) 465–4326 or by electronic mail to *prainfo@occ.treas.gov.* You may personally inspect and photocopy comments at the OCC, 400 7th Street SW., Washington, DC 20219. For security reasons, the OCC requires that visitors make an appointment to inspect comments. You may do so by calling (202) 649–6700, for persons who are deaf or hard of hearing, TTY, (202) 649–5597. Upon arrival, visitors will be required to present valid government-issued photo identification and to submit to security screening in order to inspect and photocopy comments.

All comments received, including attachments and other supporting materials, are part of the public record and subject to public disclosure. Do not enclose any information in your comment or supporting materials that you consider confidential or inappropriate for public disclosure.

Additionally, please send a copy of your comments by mail to: OCC Desk Officer, 1557–0328, U.S. Office of Management and Budget, 725 17th Street NW., #10235, Washington, DC 20503, or by email to: *oira_submission@omb.eop.gov.*

FOR FURTHER INFORMATION CONTACT: Shaquita Merritt, OCC Clearance Officer, or Beth Knickerbocker, Counsel (202) 649–5490, Legislative and Regulatory Activities Division, for persons who are deaf or hard of hearing, TTY, (202) 649–5597, Office of the Comptroller of the Currency, 400 7th Street SW., Suite 3E–218, Mail Stop 9W–11, Washington, DC 20219.

SUPPLEMENTARY INFORMATION: Under the PRA (44 U.S.C. 3501–3520), Federal agencies must obtain approval from OMB for each collection of information they conduct or sponsor. ''Collection of information'' is defined in 44 U.S.C. 3502(3) and 5 CFR 1320.3(c) to include agency requests or requirements that members of the public submit reports, keep records, or provide information to a third party. The definition contained in 5 CFR 1320.3(c) also includes a voluntary collection of information.

In connection with issuance of the Assessment,[1] OMB provided a six-month approval for this information collection. On behalf of the Agencies, the OCC is proposing to extend OMB approval of the collection for the standard three years.

Title: FFIEC Cybersecurity Assessment Tool.

OMB Number: 1557–0328.

Description: Cyber threats have evolved and increased exponentially with greater sophistication than ever before. Financial institutions[2] are exposed to cyber risks because they are dependent on information technology to deliver services to consumers and businesses every day. Cyber attacks on financial institutions may not only result in access to, and the compromise of, confidential information, but also the destruction of critical data and systems. Disruption, degradation, or unauthorized alteration of information and systems can affect a financial institution's operations and core processes and undermine confidence in the nation's financial services sector. Absent immediate attention to these rapidly increasing threats, financial institutions and the financial sector as a whole are at risk.

For this reason, the Agencies, under the auspices of the Federal Financial Institutions Examination Council (''FFIEC''), have accelerated efforts to assess and enhance the state of the financial industry's cyber preparedness and to improve the Agencies' examination procedures and training that can strengthen the oversight of financial industry cybersecurity readiness. The Agencies also have focused on improving their abilities to provide financial institutions with resources that can assist in protecting financial institutions and their customers from the growing risks posed by cyber attacks.

As part of these increased efforts, the Agencies developed the Assessment to assist financial institutions of all sizes in assessing their inherent cyber risks and their risk management capabilities. The Assessment allows a financial institution to identify its inherent cyber risk profile based on the financial institution's technologies and connection types, delivery channels, online/mobile products and technology services that it offers to its customers, its organizational characteristics, and the cyber threats it is likely to face. Once a financial institution identifies its inherent cyber risk profile, it will be able to use the Assessment's maturity matrix to evaluate its level of cybersecurity preparedness based on the financial institution's cyber risk management and oversight, threat intelligence capabilities, cybersecurity controls, external dependency management, and cyber incident management and resiliency planning. A financial institution may use the matrix's maturity levels to identify opportunities for improving the financial institution's cyber risk management based on its inherent risk profile. The Assessment also enables a financial institution to identify areas more rapidly that could improve the financial institution's cyber risk management and response programs, if needed. Use of the Assessment by financial institutions is voluntary.

Type of Review: Regular.

Affected Public: Businesses or other for-profit.

Estimated Burdens:[3]

Assessment burden estimate	Estimated number of respondents less than $500 million @ 80 hours	Estimated number of respondents $500 million–$10 billion @120 hours	Estimated number of respondents $10 billion–$50 billion @160 hours	Estimated number of respondents over $50 billion @180 hours	Estimated total respondents and total annual burden hours
OCC National Banks and Federal Savings Associations.	1,102 × 80 = 88,160 hours.	149 × 120 = 17,880 hours.	132 × 160 = 21,120 hours.	87 × 180 = 15,660 hours.	1,470 respondents 142,820 hours.
FDIC State Non-Member Banks and State Savings Associations.	3,224 × 80 = 257,920 hours.	728 × 120 = 87,360 hours.	22 × 160 = 3,520 hours.	5 × 180 = 900 hours.	3,979 respondents 349,700 hours.
Board State Member Banks and Bank Holding Companies.	4,083 × 80 = 326,640 hours.	1,083 × 120 = 129,960 hours.	74 × 160 = 11,840 hours.	42 × 180 = 7,560 hours.	5,282 respondents 476,000 hours.
NCUA Federally-Insured Credit Unions.	5,622 × 80 = 449,760 hours.	463 × 120 = 55,560 hours.	4 × 160 = 640 hours.	1 × 180 = 180 hours.	6,090 respondents 506,140 hours.
Total	14,031 × 80 = 1,122,480 hours.	2,423 × 120 = 290,760 hours.	232 × 160 = 37,120 hours.	135 × 180 = 24,300 hours.	16,821 respondents 1,474,660 hours.

On July 22, 2015, (80 FR 4355), the Office of the Comptroller of the Currency (OCC), on behalf of itself, the Board of Governors of the Federal Reserve System (Board), the Federal Deposit Insurance Corporation (FDIC), and the National Credit Union Administration (NCUA) (collectively, the Agencies) published a 60-day notice requesting comment on the collection of information titled ''FFIEC Cybersecurity Assessment Tool (Assessment).'' The Agencies received eighteen comments: Twelve comments from individuals, five from industry trade associations, and

[1] *http://www.ffiec.gov/cyberassessmenttool.htm.*

[2] For purposes of this information collection, the term ''financial institution'' includes banks, savings associations, credit unions, and bank holding companies.

[3] Burden is estimated conservatively and assumes all financial institutions will complete the Assessment. Therefore, the estimated burden may exceed the actual burden because use of the Assessment by financial institutions is not mandatory. The Agencies intend to address their review of the cybersecurity readiness and preparedness of financial institutions' technology service providers (TSPs) separately and therefore are no longer including a separate estimated burden for TSPs. However, the burden estimates for financial institutions does include that of TSPs who may assist financial institutions in completing their Assessment.

one from the Financial Services Sector Coordinating Council. The comments described below address concerns related to the collection of information. The commenters also mentioned aspects of the Assessment unrelated to the collection of information; these views are not relevant to this notice or the paperwork burden analysis and, accordingly, they are not addressed below. However, the comments unrelated to the paperwork burden analysis were provided to Agency personnel responsible for the Assessment for possible consideration in future updates of the Assessment.

1. Request for More Information on the Information Being Collected

Eight of the commenters requested that the Agencies provide additional clarity and interpretative information regarding the Assessment. Several of these commenters requested that the Agencies clarify some of the statements in the Inherent Risk Profile.[4] Commenters also stated that many of the declarative statements in the Cybersecurity Maturity[5] were subjective and susceptible to different interpretation. Other commenters requested the Agencies provide additional information regarding the relationship between the Inherent Risk Profile and the Cybersecurity Maturity parts of the Assessment.

Five commenters requested that the Agencies publish information clarifying the Assessment, such as an appendix to the Assessment or a separate frequently asked questions (FAQ) document. One commenter requested that the Agencies issue a separate document describing the assumptions the Agencies used in developing the Assessment. Another commenter requested that the Agencies provide examples of how community financial institutions might satisfy certain declarative statements. Additionally, one commenter requested that the Agencies develop a 12–18 month collaborative process with the commenter to improve the Assessment prior to finalizing the Assessment or using the Assessment on examinations.

The Agencies appreciate the feedback and comments received from the commenters. The Agencies recognize that there may be a need to clarify certain aspects of the Assessment and will consider developing an FAQ document to address questions and requests for clarification that they have received since the publication of the Assessment, including from commenters. Additionally, the Agencies are developing a process to update the Assessment on a periodic basis. The update process will consider comments from interested parties.

2. Usability and Format of the Assessment

Four commenters suggested changes to the format of the Assessment to increase usability. The commenters requested that the Agencies develop an automated or editable form of the Assessment. Commenters stated that the ability to save and edit responses contained in the Assessment would improve a financial institution's ability to use the Assessment on an ongoing basis.

One commenter also recommended that the Agencies revise the Assessment to include hyperlinks to the Assessment Glossary and User Guide instructions. Another commenter suggested that the Agencies revise the Assessment to assign a maturity level[6] automatically to the financial institution once it completes the Inherent Risk Profile portion of the Assessment. In addition, this commenter suggests that once a financial institution answers ''no'' to a declarative statement in a particular domain of the Cybersecurity Maturity, the Assessment should automatically prevent the financial institution from responding to the remainder of the declarative statements within that domain. The commenter also stated the Assessment should automatically populate answers to similar questions across domains and maturity levels.

The Agencies acknowledge the potential value of an automated or editable form of the Assessment for financial institutions that choose to use the Assessment and are exploring the possibility of developing an automated form in the future, including the possibility of hyperlinking to definitions and instructions. Any automation of the form, however, would not include the automatic assignment of a maturity level as the Agencies do not have expectations for any financial institution to reach a specific maturity level within the Assessment, and a financial institution may find value in identifying activities it is already performing at a higher maturity level.

3. Utility of the Assessment

Two commenters stated that there are a number of cybersecurity assessment frameworks available to financial institutions to use in determining their inherent risk and cybersecurity preparedness. These commenters questioned the need for the development of an additional framework. One commenter focused on the potential duplication between the National Institute of Standards and Technology's Cybersecurity Framework (NIST Framework) and the Assessment. This commenter stated that use of the Assessment by financial institutions, instead of the NIST Framework, could dilute the value of the NIST Framework as a tool for cross-sector collaboration.

The Agencies, under the auspices of the FFIEC, developed the Assessment to assist financial institutions in addressing the cyber risks unique to the financial industry. The Assessment supports financial institutions by giving them a systematic way to assess their cybersecurity preparedness and evaluate their progress. Unlike other frameworks, the Assessment is specifically tailored to the products and services offered by financial institutions and the control and risk mitigation techniques used by the industry. In addition, the Agencies have received many requests from financial institutions, particularly smaller financial institutions, to provide them with a meaningful way to assess cyber risks themselves based on financial sector-specific risks and mitigation techniques. The Agencies developed the Assessment, in part, to address those requests and received several positive comments about how the Assessment met this need. As discussed more fully below, a financial institution is not required to use the Assessment and may choose any method the financial institution determines is relevant and meaningful to assess its inherent risk and cybersecurity preparedness.

The Agencies agree that the NIST Framework is a valuable tool and the Agencies incorporated concepts from the NIST Framework into the Assessment. The Assessment contains an appendix that maps the NIST Framework to the Assessment. NIST reviewed and provided input on the mapping to ensure consistency with the NIST Framework's principles and to highlight the complementary nature of the two resources. The Agencies also agree that the NIST Framework provides a mechanism for cross-sector coordination. However, because of the unique cyber risks facing the financial industry, the Agencies identified a need

[4] Part One of the Assessment, the Inherent Risk Profile, assists a financial institution in identifying its inherent risk before implementing controls.

[5] Part Two of the Assessment, the Cybersecurity Maturity, assists a financial institution in determining its current state of cybersecurity preparedness represented by maturity levels across five domains.

[6] Within the five domains of the Cybersecurity Maturity, declarative statements describe the requirements for achieving five possible maturity levels for each domain.

to develop a more granular framework that is more specific to the financial services industry to assist financial institutions in evaluating themselves.

Several commenters also raised questions regarding the Agencies' use of a maturity model as a part of the Assessment. Four commenters were concerned with the ''all or nothing'' approach to achieving a maturity level, particularly insofar as a financial institution might not be credited for activities taken at a higher level that might mitigate risks at a lower level. Some commenters stated that a maturity model is too prescriptive and does not adequately account for compensating controls or risk tolerance and others questioned why the Assessment does not discuss the concept of residual risk.

The Agencies designed the Cybersecurity Maturity contained in the Assessment to assist financial institutions in understanding the ranges of controls and practices needed to manage cyber risk. As previously stated, use of the tool is voluntary and a financial institution may use any method to assess inherent risk and cybersecurity preparedness that it considers relevant and meaningful.

The User Guide does provide general parameters to assist financial institutions that choose to use the Assessment in considering how to align inherent risk with the financial institution's processes and control maturity.

4. Accuracy of Burden Estimate

The Agencies estimated that, annually, it would take a financial institution 80 burden hours, on average, to complete the Assessment. Five comment letters addressed the accuracy of the Agencies' burden estimate. These letters generally stated that the Agencies' burden estimate understated the burden involved. One commenter stated that credit unions that choose to use the Assessment could take 80–100 hours to complete it. However, other commenters stated that it may take a financial institution several hundred hours to complete the Assessment in the first year of use.

One commenter stated that the estimated burden will vary based on financial institution size, with smaller financial institutions requiring hundreds of hours to complete the Assessment, medium-sized financial institutions approaching 1,000–2,000 hours, and the large financial institutions investing 1,000–2,000 hours or more. This commenter stated that the burden estimate includes the amount of time needed to collect information and documentation sufficient to provide answers supportable in the examination context, report to internal steering committees and prepare for examinations. Another commenter stated that the Agencies' evaluation of 80 hours ''largely underestimates'' the time required to complete the Assessment. This commenter stated that the initial completion of the Assessment would include collecting data, discussing and verifying responses, performing gap analysis, preparing and implementing action plans, where needed, and presenting results to executives.

In light of the comments received and recent supervisory experience performing information technology examinations, the Agencies are revising their burden estimates. In revisiting the burden estimates, the Agencies are taking a more conservative approach to estimating the potential burden involved in using the Assessment. The Agencies recognize that size and complexity of a financial institution, as noted by some of the commenters, impacts the amount of time and resources to complete the Assessment and therefore the Agencies have further refined their burden estimates based on financial institution asset size.

The Agencies note that the revised burden estimates assume that the Assessment is completed by knowledgeable individuals at the financial institution who have readily-available information to complete the Assessment. The Agencies' revised burden estimates do not include the amount of time associated with reporting to management and internal committees, developing and implementing action plans, and preparing for examination as such time and resources are outside the scope of the PRA.

5. Information Storage and Confidentiality

Two commenters requested information on how the Agencies will use and store the Assessment information that financial institutions provide to the Agencies.

The Agencies are subject to compliance with the Federal Information Security Management Act (FISMA) and they operate cybersecurity programs to protect critical information resources, including sensitive financial institution information obtained or created during their supervision activities. The programs include policies, standards and controls, monitoring, technical controls, and other information assurance processes. If a financial institution provides the Assessment, or any other, confidential information to an examiner as part of the supervisory process, the storage and use of such information would be subject to the Agencies' cybersecurity programs.

6. Benchmarking

One commenter suggested that the Agencies collect, anonymize, and share Assessment information to allow financial institutions to benchmark themselves against comparably sized financial institutions. Since use of the Assessment by financial institutions is voluntary, the Agencies do not to intend to collect the Assessment from financial institutions or publish the results.

7. Voluntary Use of the Assessment

Several commenters expressed concern that since some of the Agencies will be using the Assessment as an aid in their examination processes, financial institutions may believe that their use of the Assessment is mandated by the Agencies. Another commenter requested that the Agencies ensure that examiners do not force financial institutions to use the Assessment or require financial institutions to justify their decisions to use an alternative cybersecurity assessment. Several commenters requested that the Agencies reiterate to examiners and to financial institutions that use of the Assessment by a financial institution is voluntary.

As the Agencies stated when the Assessment was first published, use of the Assessment by financial institutions is voluntary. Financial institutions may use the Assessment or any other framework or process to identify their inherent risk and cybersecurity preparedness. The Agencies' examiners will not require a financial institution to complete the Assessment. However, if a financial institution has completed an Assessment, examiners may ask the financial institution for a copy, as they would for any risk self-assessment performed by the financial institution. The Agencies are educating examiners on the voluntary nature of the Assessment and including statements about its voluntary nature in examiner training materials.

Additional Comments Welcome: Comments continue to be invited on:

(a) Whether the collection of information is necessary for the proper performance of the functions of the Agencies, including whether the information has practical utility;

(b) The accuracy of the Agencies' estimates of the burden of the collection of information;

(c) Ways to enhance the quality, utility, and clarity of the information to be collected;

(d) Ways to minimize the burden of the collection on respondents, including through the use of automated collection techniques or other forms of information technology; and

(e) Estimates of capital or start-up costs and costs of operation, maintenance, and purchase of services to provide information.

Dated: December 10, 2015.

Stuart E. Feldstein,

Director, Legislative and Regulatory Activities Division, Office of the Comptroller of the Currency.

[FR Doc. 2015–31583 Filed 12–15–15; 8:45 am]

BILLING CODE 4810–33–P

DEPARTMENT OF THE TREASURY

Office of Foreign Assets Control

Additional Designations, Foreign Narcotics Kingpin Designation Act

AGENCY: Office of Foreign Assets Control, Treasury.

ACTION: Notice.

SUMMARY: The U.S. Department of the Treasury's Office of Foreign Assets Control (OFAC) is publishing the names of three individuals and two entities whose property and interests in property have been blocked pursuant to the Foreign Narcotics Kingpin Designation Act (Kingpin Act) (21 U.S.C. 1901–1908, 8 U.S.C. 1182).

DATES: The designation by the Acting Director of OFAC of the three individuals and two entities identified in this notice pursuant to section 805(b) of the Kingpin Act is effective on December 10, 2015.

FOR FURTHER INFORMATION CONTACT: Assistant Director, Sanctions Compliance & Evaluation, Office of Foreign Assets Control, U.S. Department of the Treasury, Washington, DC 20220, Tel: (202) 622–2490.

SUPPLEMENTARY INFORMATION:

Electronic and Facsimile Availability

This document and additional information concerning OFAC are available on OFAC's Web site at *http://www.treasury.gov/ofac* or via facsimile through a 24-hour fax-on-demand service at (202) 622–0077.

Background

The Kingpin Act became law on December 3, 1999. The Kingpin Act establishes a program targeting the activities of significant foreign narcotics traffickers and their organizations on a worldwide basis. It provides a statutory framework for the imposition of sanctions against significant foreign narcotics traffickers and their organizations on a worldwide basis, with the objective of denying their businesses and agents access to the U.S. financial system and the benefits of trade and transactions involving U.S. companies and individuals.

The Kingpin Act blocks all property and interests in property, subject to U.S. jurisdiction, owned or controlled by significant foreign narcotics traffickers as identified by the President. In addition, the Secretary of the Treasury, in consultation with the Attorney General, the Director of the Central Intelligence Agency, the Director of the Federal Bureau of Investigation, the Administrator of the Drug Enforcement Administration, the Secretary of Defense, the Secretary of State, and the Secretary of Homeland Security, may designate and block the property and interests in property, subject to U.S. jurisdiction, of persons who are found to be: (1) Materially assisting in, or providing financial or technological support for or to, or providing goods or services in support of, the international narcotics trafficking activities of a person designated pursuant to the Kingpin Act; (2) owned, controlled, or directed by, or acting for or on behalf of, a person designated pursuant to the Kingpin Act; or (3) playing a significant role in international narcotics trafficking.

On December 10, 2015, the Acting Director of OFAC designated the following three individuals and two entities whose property and interests in property are blocked pursuant to section 805(b) of the Kingpin Act.

Individuals

1. BURITICA HINCAPIE, Geova (a.k.a. ''CAMILO CHATA''; a.k.a. ''MI VIEJO''); DOB 18 Sep 1970; POB San Rafael, Antioquia, Colombia; Cedula No. 71215823 (Colombia) (individual) [SDNTK]. Designated for acting for or on behalf of Juan Carlos MESA VALLEJO, LA OFICINA DE ENVIGADO, and/or LOS CHATAS pursuant to section 805(b)(3) of the Kingpin Act, 21 U.S.C. 1904(b)(3).

2. MAYA RIOS, Edison (a.k.a. ''GOMELO''); DOB 01 Apr 1974; POB Medellin, Antioquia, Colombia; Cedula No. 98568816 (Colombia) (individual) [SDNTK]. Designated for acting for or on behalf of Juan Carlos MESA VALLEJO, LA OFICINA DE ENVIGADO, and/or LOS CHATAS pursuant to section 805(b)(3) of the Kingpin Act, 21 U.S.C. 1904(b)(3).

3. ZAPATA BERRIO, Jorge Oswaldo (a.k.a. ''JONAS''); DOB 15 May 1979; POB Bello, Antioquia, Colombia; Cedula No. 71216000 (Colombia) (individual) [SDNTK] (Linked To: MOTOS Y REPUESTOS JOTA). Designated for acting for or on behalf of Juan Carlos MESA VALLEJO, LA OFICINA DE ENVIGADO, and/or LOS CHATAS pursuant to section 805(b)(3) of the Kingpin Act, 21 U.S.C. 1904(b)(3).

Entities

4. LOS CHATAS, Bello, Antioquia, Colombia [SDNTK]. Designated for being controlled, directed by, or acting for or on behalf of, Juan Carlos MESA VALLEJO and/or LA OFICINA DE ENVIGADO pursuant to section 805(b)(3) of the Kingpin Act, 21 U.S.C. 1904(b)(3).

5. MOTOS Y REPUESTOS JOTA, Calle 49 AA 99 EE 58, Medellin, Antioquia, Colombia; Matricula Mercantil No. 21–567083–02 (Medellin) [SDNTK]. Designated for being owned, controlled, or directed by Jorge Oswaldo ZAPATA BERRIO pursuant to section 805(b)(3) of the Kingpin Act, 21 U.S.C. 1904(b)(3).

Dated: December 10, 2015.

John E. Smith,

Acting Director, Office of Foreign Assets Control.

[FR Doc. 2015–31569 Filed 12–15–15; 8:45 am]

BILLING CODE 4810–AL–P

DEPARTMENT OF VETERANS AFFAIRS

[OMB Control No. 2900–NEW (VA Forms 10–10131, 10–10132, 10–10133)]

Proposed Information Collection (Patient Aligned Care Team (PACT): Helping Veterans Manage Chronic Pain, Engaging Caregivers Veterans With Dementia, Patient Centered Medical Home Operation Enduring Freedom/Operation Iraqi Freedom (OEF/OIF) Veterans With Post Traumatic Stress Disorder (PTSD): Bridging Primary and Behavioral Health Care (BP–BHC))

Activity: Comment Request.

AGENCY: Veterans Health Administration, Department of Veterans Affairs.

ACTION: Notice.

SUMMARY: The Veterans Health Administration (VHA), Department of Veterans Affairs (VA), is announcing an opportunity for public comment on the proposed collection of certain information by the agency. Under the Paperwork Reduction Act (PRA) of 1995, Federal agencies are required to publish notice in the **Federal Register** concerning each proposed collection of information, including each new

collection, and allow 60 days for public comment in response to the notice. This notice solicits comments on the information collections needed to evaluate the project aims to enhance Patient Aligned Care Team (PACT) implementation by providing education about the needs and experiences of OEF/OIF Veterans that is emotionally resonant and engaging to learners on a visceral level, as well as promoting a greater sense of alignment with VA's mission of providing patient-centered care.

DATES: Written comments and recommendations on the proposed collection of information should be received on or before February 16, 2016.

ADDRESSES: Submit written comments on the collection of information through Federal Docket Management System (FDMS) at *www.Regulations.gov;* or Brian McCarthy, Office of Regulatory and Administrative Affairs, Veterans Health Administration (10B4), Department of Veterans Affairs, 810 Vermont Avenue NW., Washington, DC 20420 or email: *Brian.McCarthy4@va.gov*. Please refer to ''OMB Control No. 2900–NEW (PACT: Helping Veterans Manage Chronic Pain, Engaging Caregivers Veterans with Dementia, Patient Centered Medical Home OEF/OIF Veterans with PTSD: Bridging Primary and Behavioral Health Care (BP–BHC))'' in any correspondence. During the comment period, comments may be viewed online through the FDMS.

FOR FURTHER INFORMATION CONTACT: Brian McCarthy at (202) 461–6345.

SUPPLEMENTARY INFORMATION: Under the PRA of 1995 (Pub. L. 104–13; 44 U.S.C. 3501—3521), Federal agencies must obtain approval from the Office of Management and Budget (OMB) for each collection of information they conduct or sponsor. This request for comment is being made pursuant to Section 3506(c)(2)(A) of the PRA.

With respect to the following collection of information, VHA invites comments on: (1) Whether the proposed collection of information is necessary for the proper performance of VHA's functions, including whether the information will have practical utility; (2) the accuracy of VHA's estimate of the burden of the proposed collection of information; (3) ways to enhance the quality, utility, and clarity of the information to be collected; and (4) ways to minimize the burden of the collection of information on respondents, including through the use of automated collection techniques or the use of other forms of information technology.

Titles: PACT: Helping Veterans Manage Chronic Pain, Engaging Caregivers Veterans with Dementia, Patient Centered Medical Home OEF/OIF Veterans with PTSD: Bridging Primary and Behavioral Health Care (BP–BHC), VA Forms 10–10131, 10–10132, and 10–10133.

OMB Control Number: 2900–NEW.

Type of Review: New data collection.

Abstract: The Office of Patient Care Services, Primary Care Program Office, has undertaken an initiative to implement a patient-centered medical home model at all Veterans Health Administration (VHA) Ambulatory Primary Care sites. In addition to the VHA's Universal Health Care Services implementation of the PACT, Patient Care Services has funded 5 PACT Demonstration Laboratories across the country.

Affected Public: Individuals or households.

Estimated Annual Burden: 2,195 burden hours.

Estimated Average Burden Per Respondent: 272 minutes.

Frequency of Response: 127 responses annually.

Estimated Number of Respondents: 20,110.

By direction of the Secretary.

Kathleen M. Manwell,

Program Analyst, VA Privacy Service, Office of Privacy and Records Management, Department of Veterans Affairs.

[FR Doc. 2015–31512 Filed 12–15–15; 8:45 am]

BILLING CODE 8320–01–P

FEDERAL REGISTER

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Part II

Department of Transportation

Federal Motor Carrier Safety Administration

49 CFR Parts 385, 386, 390, and 395
Electronic Logging Devices and Hours of Service Supporting Documents; Final Rule

DEPARTMENT OF TRANSPORTATION

Federal Motor Carrier Safety Administration

49 CFR Parts 385, 386, 390, and 395

[Docket No. FMCSA–2010–0167]

RIN 2126–AB20

Electronic Logging Devices and Hours of Service Supporting Documents

AGENCY: Federal Motor Carrier Safety Administration (FMCSA), DOT.

ACTION: Final rule.

SUMMARY: The Federal Motor Carrier Safety Administration (FMCSA) amends the Federal Motor Carrier Safety Regulations (FMCSRs) to establish: Minimum performance and design standards for hours-of-service (HOS) electronic logging devices (ELDs); requirements for the mandatory use of these devices by drivers currently required to prepare HOS records of duty status (RODS); requirements concerning HOS supporting documents; and measures to address concerns about harassment resulting from the mandatory use of ELDs. The requirements for ELDs will improve compliance with the HOS rules.

DATES: *Effective Date:* February 16, 2016.

Compliance Date: December 18, 2017.

Petitions for Reconsideration: The deadline for submitting petitions for reconsideration is January 15, 2016.

The incorporation by reference of certain publications listed in the regulations is approved by the Director of the Office of the Federal Register as of February 16, 2016.

FOR FURTHER INFORMATION CONTACT: Mr. Michael Huntley, Vehicle and Roadside Operations Division, Office of Bus and Truck Standards and Operations, Federal Motor Carrier Safety Administration, 1200 New Jersey Avenue SE., Washington, DC 20590–0001 or by telephone at 202 366–5370.

SUPPLEMENTARY INFORMATION: The Agency organizes the final rule as follows:

I. Abbreviations and Acronyms

American Bus Association ABA
American Moving & Storage Association AMSA
American Pyrotechnics Association APA
American Trucking Association ATA
Associated General Contractors of America AGC
Automatic On-Board Recording Device AOBRD
Commercial Vehicle Safety Alliance CVSA
Commercial Driver's License CDL
Commercial Motor Vehicle CMV
Department of Transportation DOT
Electronic Control Module ECM
Electronic Logging Device ELD
Electronic On-Board Recorder EOBR
Electronic Records of Duty Status eRODs
Engine Control Unit ECU
Extensible Markup Language XML
Federal Motor Carrier Safety Administration FMCSA
Federal Motor Carrier Safety Regulations FMCSRs
Fleet Management System FMS
Global Positioning System GPS
Hazardous Materials HM
Hours of Service HOS
Information Collection Request ICR
Institute of Makers of Explosives IME
Initial Regulatory Flexibility Assessment IRFA
International Brotherhood of Teamsters IBT
International Foodservice Distributors Association IFDA
Motor Carrier Safety Advisory Committee MCSAC
Motor Carrier Safety Assistance Program MCSAP
National Federation of Independent Businesses NFIB
National Limousine Association NLA
National Motor Freight Traffic Association NMFTA
National Propane Gas Association NPGA
National Transportation Safety Board NTSB
Notice of Proposed Rulemaking NPRM
Office of Management and Budget OMB
Ohio Trucking Association OTA
On-Board Diagnostics OBD–II
On-Duty Not Driving ODND
Owner-Operator Independent Driver Association OOIDA
Quick Response QR
Record of Duty Status RODS
Regulatory Impact Analysis RIA
Supplemental Notice of Proposed Rulemaking SNPRM
Truck Rental and Leasing Association TRALA
Truckload Carriers Association TCA
United Motorcoach Association UMA
Vehicle Identification Number VIN

II. Executive Summary

This rule improves commercial motor vehicle (CMV) safety and reduces the overall paperwork burden for both motor carriers and drivers by increasing the use of ELDs within the motor carrier industry, which will, in turn, improve compliance with the applicable HOS rules. Specifically, this rule: (1) Requires new technical specifications for ELDs that address statutory requirements; (2) mandates ELDs for drivers currently using RODS; (3) clarifies supporting document requirements so that motor carriers and drivers can comply efficiently with HOS regulations; and (4) adopts both procedural and technical provisions aimed at ensuring that ELDs are not used to harass CMV operators.

In August 2011, the United States Court of Appeals for the Seventh Circuit vacated the April 2010 rule on electronic on-board recorders (EOBRs), including the device performance standards. See *Owner-Operator Indep. Drivers Ass'n* v. *Fed. Motor Carrier Safety Admin.,* 656 F.3d 580 (7th Cir. 2011) available in the docket for this rulemaking. This rulemaking addresses issues raised by that decision.

All of the previous rulemaking notices, as well as notices announcing certain Motor Carrier Safety Advisory Committee (MCSAC) meetings and public listening sessions, referred to the devices and support systems used to record electronically HOS RODS as EOBRs. Beginning with the supplemental notice of proposed rulemaking (SNPRM) for this rulemaking (79 FR 17656, March 28, 2014), the term ''electronic logging device (ELD)'' was substituted for the term ''EOBR'' in order to be consistent with the term used in MAP–21. To the extent applicable, a reference to an ELD includes a related motor carrier or provider central support system—if one is used—to manage or store ELD records.

FMCSA based this rulemaking on the authority in a number of statutes, including the Motor Carrier Act of 1935, the Motor Carrier Safety Act of 1984, the Truck and Bus Safety and Regulatory Reform Act of 1988, the Hazardous Materials Transportation Authorization Act of 1994 (HMTAA), and MAP–21.

Today's rule makes changes from the SNPRM. The key changes are:

1. *Documents Requirements*—The maximum number of supporting documents that must be retained has been lowered from 10 in the SNPRM to 8 in today's rule. In addition, the timeframe in which a driver must submit RODS and supporting documents to a motor carrier has been extended from 8 to 13 days.

2. *Technical Specifications*—Two of the options for the required electronic data transfer included in the SNPRM (Quick Response (QR) codes and TransferJet) [1] have been removed. Electronic data transfer must be made by either (1) wireless Web services and email *or* (2) Bluetooth® and USB 2.0. Furthermore, to facilitate roadside inspections, and ensure authorized safety officials are always able to access this data, including cases of limited connectivity an ELD must provide either a display or printout.

3. *Exemptions*—Two optional exceptions are added from the required use of ELDs: (1) Driveaway-towaway operations are not required to use an ELD, provided the vehicle driven is part of the shipment; and (2) ELDs are not required on CMVs older than model year 2000.

4. *ELD Certification*—To ensure that ELD providers [2] have the opportunity for due process in the event that there are compliance issues with their product, procedures are added that FMCSA would employ if it identified problems with an ELD model before it would remove the model from the Agency's list of certified products.

In this rule, the Agency clarifies its supporting document requirements, recognizing that ELD records serve as the most robust form of documentation for on-duty driving periods. FMCSA neither increases nor decreases the burden associated with supporting documents. These changes are expected to improve the quality and usefulness of the supporting documents retained, and consequently increase the effectiveness and efficiency of the Agency's review of motor carriers' HOS records during on-site compliance reviews and its ability to detect HOS rules violations. The Agency is currently unable to evaluate the impact the changes to supporting documents requirements would have on crash reductions.

[1] Quick Response (QR) codes convert information into two dimensional barcodes that can be read using common tools such as smart phones or hand scanners. TransferJet, the close-proximity transfer of data, allows a large amount of data to be transmitted at high speed when two devices are held very close together, or ''bumped.''

[2] ''ELD provider'' describes a manufacturer or packager of an ELD that complies with the appendix to subpart B of part 395 that is also responsible for registering and certifying the ELD on FMCSA's Web site.

Today's rule contains provisions calculated to prevent the use of ELDs to harass drivers. FMCSA explicitly prohibits a motor carrier from harassing a driver, and provides that a driver may file a written complaint under § 386.12(b) if the driver was subject to harassment. Technical provisions that address harassment include a mute function to ensure that a driver is not interrupted in the sleeper berth. Further, the design of the ELD allows only limited edits of an ELD record by both the driver and the motor carrier's agents and in either case the original record generated by the device cannot be changed, which will protect the driver's RODS from manipulation.

Cost and Benefits

The Regulatory Impact Analysis (RIA) for today's rule retains two of the four options put forward in the SNPRM:

- Option 1: ELDs are mandated for all CMV operations subject to 49 CFR part 395.
- Option 2: ELDs are mandated for all CMV operations where the driver is required to complete RODS under 49 CFR 395.8.

In today's rule, FMCSA adopts a slight variation of Option 2 from the SNPRM. Based on comments received on the SNPRM, Options 3 and 4 are not included in the final rule. Unlike the SNPRM, to provide a backup means of accessing data FMCSA will require either a display or printout regardless of the specific data transfer technologies required, thus rendering Options 3 and 4 unnecessary. In response to comments received to the SNPRM, the specific data transfer technologies required under today's rule are simplified, with QR Codes and TransferJet technologies eliminated. In the SNPRM, the required data transfer technologies were the same across the four options presented, with the only differences being the population the rule would apply to and a specific requirement for the ability to print out data. In today's rule, the required data transfer technologies are the same across the two options presented. The change in data transfer technologies from the SNPRM does not affect the per unit cost of the ELD. However, in today's rule the purchase price of the ELD was reduced from that used in the SNPRM, to reflect the most up-to-date prices consistent with the technical requirements of the rule. This change in data transfer technologies from the SNPRM also simplifies and enhances uniformity of enforcement. For purposes of comparison, the analysis from the SNPRM, including Options 3 and 4, is available in the docket for this rulemaking.

The RIA details the costs and benefits of this rule and discusses the methods by which they were derived. The major elements that contribute to the overall net benefits of the rulemaking are shown below in Table 1. The figures presented are annualized using 7 percent and 3 percent discount rates.

TABLE 1—SUMMARY OF ANNUALIZED COSTS AND BENEFITS

[2013 $ millions]

	Option 1: all HOS drivers		Option 2: (adopted) RODS drivers only	
	3%	7%	3%	7%
Total Benefits	$3,150	$3,124	$3,035	$3,010
Safety (Crash Reductions)	694	687	579	572
Paperwork Savings	2,456	2,438	2,456	2,438
Total Costs	2,298	2,280	1,851	1,836
New ELD Costs	1,348	1,336	1,042	1,032
AOBRD Replacement Costs	2	2	2	2
HOS Compliance Costs	936	929	797	790
CMV Driver Training Costs	9	10	7	8
Enforcement Training Costs	1	2	1	2
Enforcement Equipment Costs	1	1	1	1
Net Benefits	852	844	1,184	1,174

Under today's rule, FMCSA estimates 1,844 crashes avoided annually and 26 lives saved annually.

TABLE 2—ESTIMATED REDUCTIONS IN CRASHES

	Option 1: all HOS drivers	Option 2: RODS drivers only
Crashes Avoided	2,217	1,844
Injuries Avoided	675	562
Lives Saved	31	26

III. Public Participation

To view comments, as well as any documents identified in this preamble as available in the docket, go to *http://www.regulations.gov*. Insert the docket number, FMCSA–2010–1067, in the keyword box, and click ''Search.'' Next, click the ''Open Docket Folder'' button and choose the document to review. If you do not have access to the Internet, you may view the docket online by visiting the Docket Management Facility in Room W12–140 on the ground floor of the DOT West Building, 1200 New Jersey Avenue SE., Washington, DC 20590, between 9 a.m. and 5 p.m., e.t., Monday through Friday, except Federal holidays.

IV. Overview

A. Today's Final Rule

Today's rule mandates ELD use for HOS compliance. It applies to most motor carriers and drivers who are currently required to prepare and retain paper RODS to comply with HOS regulations under part 395. Today's rule allows limited exceptions to the ELD mandate. As indicated in § 395.1(e), drivers who operate using the timecard exception are not required to keep RODS and will not be required to use ELDs. The following drivers are excepted in § 395.8(a)(1)(iii) from installing and using ELDs and may continue to use ''paper'' RODS: [3]

- Drivers who use paper RODS for not more than 8 days during any 30 day period.
- Drivers who conduct driveaway-towaway operations, where the vehicle being driven is the commodity being delivered.

[3] ''Paper RODS'' means RODS that are not kept on an ELD or AOBRD, but instead are either recorded manually in accordance with § 395.8(f) or on a computer not synchronized to the vehicle or that otherwise does not qualify as an ELD or AOBRD.

• Drivers of vehicles manufactured before model year 2000.

This exception is limited to the ELD requirement only; these drivers are still bound by the RODS requirements in 49 CFR part 395 and must prepare paper logs when required unless they voluntarily elect to use an ELD.

As required by MAP–21, § 395.8(a)(1) directs a motor carrier operating CMVs to install and require each of its drivers to use an ELD to record the driver's duty status no later than December 18, 2017. Drivers and motor carriers currently using § 395.15-compliant Automatic Onboard Recorders (AOBRDs), however, are allowed to continue to use AOBRDs for an additional 2 years after that date.

1. Supporting Documents

Under § 395.11(d), motor carriers must retain up to 8 supporting documents for every 24-hour period a driver who uses ELDs is on duty. Section 395.8(k) continues to require that motor carriers retain RODS and supporting documents for 6 months. New § 395.11(b) specifies that drivers must submit supporting documents to the motor carrier no later than 13 days after receiving them. While ELDs are highly effective at monitoring compliance with HOS rules during driving periods, supporting documents are still needed to verify on-duty not driving time (ODND). In § 395.2, today's rule defines ''supporting document.'' To be considered supporting documents, they need to meet certain criteria in § 395.11(c)(2). The eight documents should contain these elements from § 395.11(c)(2)(i):

• Driver name or carrier-assigned identification number, either on the document or on another document enabling the carrier to link the document to the driver, or the vehicle unit number if that number can be linked to the driver;

• Date;

• Location (including name of nearest city, town, or village); and

• Time.

FMCSA acknowledges that sometimes drivers will not receive documents that meet all these criteria. If a driver has fewer than eight documents that include the four elements under § 395.11(c)(2)(ii), a document that contains all of the elements except ''time'' is considered a supporting document; otherwise, it is not considered a supporting document. FMCSA notes that there is no obligation on a motor carrier to create or annotate documents that it did not otherwise generate or receive in its normal course of business.

If a driver submits more than eight documents to the motor carrier for a single day, paragraph (d)(3) requires that the motor carrier must include the first and last documents for that day among the eight documents that must be retained. If a driver submits fewer than eight documents, the motor carrier must keep each document.

Supporting documents consist of the following five categories, described in § 395.11(c):

• Bills of lading, itineraries, schedules, or equivalent documents that indicate the origin and destination of each trip;

• Dispatch records, trip records, or equivalent documents;

• Expense receipts;

• Electronic mobile communication records, reflecting communications transmitted through a fleet management system (FMS); and

• Payroll records, settlement sheets, or equivalent documents that indicates payment to a driver.

Except for drivers who use paper RODS, there is no requirement for drivers or motor carriers to retain other types or categories of documents. If a driver keeps a paper RODS under § 395.8(a)(1)(iii), § 395.11(d)(4) states that toll receipts must be retained as well. For drivers using paper RODS, the toll receipts do not count in applying the eight-document cap. In applying the limit on the number of documents, § 395.11(d)(2) states that all information contained in an electronic mobile communication record, such as communication records kept by an FMS, will be counted as one document per duty status day.

Section 395.11(e) requires motor carriers to retain supporting documents in a way that allows them to be matched to a driver's RODS. Section 395.11 (f) prohibits drivers or carriers from destroying or defacing a supporting document or altering information on a document. Section 395.11(g) requires the driver to make supporting documents in his or her possession available to an authorized Federal, State, or local official on request. However, the driver only has to provide the documents in the format in which the driver has them available.

Self-compliance systems. On a case-by-case basis, FMCSA may authorize exemptions to allow a motor carrier to use a supporting document self-compliance system, as required by section 113 of HMTAA. Using the procedures already in 49 CFR part 381, subpart C, FMCSA will consider requests for exemption from the retention and maintenance requirements for supporting documents. This alternative system would ensure compliance with the HOS regulations. Section 395.11(h) references the procedures for applying for an exemption for a self-compliance system.

2. Harassment

Today's rule includes a definition of ''harassment,'' which covers an action by a motor carrier toward one of its drivers that the motor carrier knew, or should have known, would result in the driver violating § 392.3, which prohibits an ill or fatigued driver from operating a CMV, or part 395, the HOS rules. Harassment must involve information available to the motor carrier through an ELD or other technology used in combination with and not separable from an ELD. In § 390.36(b), FMCSA explicitly prohibits a motor carrier from harassing a driver.

Today's rule adopts a regulatory prohibition on harassment, as defined, subject to a civil penalty in addition to the penalty for the underlying violation. The rule also has other provisions intended to ensure that ELDs are not used to harass drivers. Some of these are technical provisions intended to guard against harassment. Others are procedural, to give drivers recourse when they are harassed.

Among the technical solutions addressing harassment is a required mute function for FMSs with ELD functionality that would be used to comply with this rule. The mute function ensures that a driver is not interrupted by an FMS that includes an ELD function when the driver is in the sleeper berth. FMCSA emphasizes that a minimally compliant ELD is not required to have voice or text message communication capabilities or to produce audible alerts or alarms. For ELDs that have the ability to generate audible signals, however, today's rule requires that the devices have volume control. This control must either automatically engage, or allow the driver to turn off or mute the ELD's audible output when the driver puts the ELD into a sleeper berth status, and, in the case of co-drivers, when no other driver has logged into the ELD in an on-duty driving status.

The design of the ELD allows only limited edits of an ELD record by both the driver and the motor carrier's agents and in either case the original record generated by the device cannot be changed. Drivers may edit, enter missing information into, and annotate the ELD records but the original record will be retained. The ELD prevents electronically-recorded driving time from being shortened. A motor carrier may request edits to a driver's RODS to

ensure accuracy. However, for the carrier-proposed changes, the driver must confirm them and certify and submit the updated RODS. Section 395.30(c)(2) requires all edits, whether made by a driver or the motor carrier, be annotated to document the reason for the change. All of these procedures and design features will help a driver retain control of the RODS, and ensure against harassment.

The rule requires that anyone making edits to an ELD record have a unique login ID. Drivers must have access to their own ELD records without having to request access through their motor carriers, ensuring that drivers can review the ELD record and determine whether unauthorized edits/annotations have been entered.

Section § 395.26 describes ELD data records, including location data, when the driver changes duty status, when a driver indicates personal use or yard moves, when the CMV engine powers up and shuts down, and at 60-minute intervals when the vehicle is in motion. FMCSA emphasizes that it does not require real-time tracking of CMVs or the recording of precise location information in today's rule.

For the purposes of HOS enforcement, FMCSA requires all ELDs to record location in a way that provides an accuracy of approximately a 1-mile radius during on-duty driving periods. However, when a CMV is operated for authorized personal use, the position reporting accuracy, as required by section 4.3.1.6(f), is reduced to an approximate 10-mile radius, to further protect the driver's privacy. While a motor carrier could employ technology that provides more accurate location information internally, when the ELD transmits data to authorized safety officials, the location data will be limited to the reduced proximities.

Today's rule includes a new process for driver complaints related to harassment involving ELDs.

Civil penalties against motor carriers found to be harassing drivers are governed under Appendix B to Part 386 and today's rule addresses how penalties for harassment will be assessed (Part 386, Appendix B, (a)(7)). Because harassment will be considered in cases of alleged HOS violations, the penalty for harassment is in addition to the underlying violation under 49 CFR 392.3 or part 395. An underlying violation must be found in order for a harassment penalty to be assessed.

3. Technical Specifications; Implementation Period

Today's rule includes technical specifications for an ELD device. All ELDs must meet standard requirements which include recording certain information related to a driver's HOS status, but they are not required to track a CMV or driver in real time. ELDs are not required to include a capability to communicate between the driver and the motor carrier. All ELDs, however, must capture and transfer identical data regarding a driver's HOS status to authorized safety officials. Although an ELD may be part of an FMS, the ELD functions required by this rule are limited to automatically recording all driving time, and intermittently recording certain other information. The ELD functions will make it easy for the driver to record off duty, sleeper berth, and ODND time, and transfer that information to authorized safety officials and motor carriers.

Section 395.26 provides that the ELD automatically record the following data elements at certain intervals: date; time; location information; engine hours; vehicle miles; and identification information for the driver, the authenticated user, the vehicle, and the motor carrier. Unless the driver has indicated authorized personal use of the vehicle, those data elements are automatically recorded when the driver indicates a change of duty status or a change to a special driving category. When the driver logs into or out of the ELD, or there is a malfunction or data diagnostic event, the ELD records all the data elements except geographic location. When the engine is powered up or down, the ELD records all the data elements required by § 395.26. When a CMV is in motion and the driver has not caused some kind of recording in the previous hour, the ELD will automatically record the data elements. However, if a record is made during a period when the driver has indicated authorized personal use, some elements will be left blank and location information will be logged with a resolution of only a single decimal point (approximately 10-mile radius).

In addition to the information that the ELD records automatically, both the motor carrier and the driver must input manually some information in the ELD. The driver may select on the ELD an applicable special driving category, or annotate the ELD record to explain driving under applicable exceptions, including personal conveyance if configured by the motor carrier.

FMCSA will provide a list of provider-certified ELDs on its Web site. Today's rule requires interstate motor carriers to use only an ELD that appears on that list of registered ELDs. ELD providers must register through a FMCSA Web site, and certify through the Web site that their products meet the technical specifications in today's rule. FMCSA will publish compliance test procedures to assist providers in determining whether their products meet the requirements. ELD providers are not required to use FMCSA's compliance test procedures. They may use any test procedures they deem appropriate, but FMCSA will use the compliance test procedures during any investigation and rely upon the results from that procedure in making any preliminary determinations of whether a system satisfies the requirements of today's rule.

If the Agency believes an ELD model does not meet the required standards, new section 5.4 of the technical specifications prescribes a process of remedying the problem, or, if necessary, removing that model from FMCSA's registration Web site.

To meet roadside electronic data reporting requirements, under section 4.9.1 of the technical specifications, an ELD must support one of two options for different types of electronic data transfer. The first option is a telematics-type ELD. At a minimum, it must electronically transfer data to an authorized safety official on demand via wireless Web services and email. The second option is a local transfer method-type ELD. At a minimum, it must electronically transfer data to an authorized safety official on demand via USB2.0 and Bluetooth. Additionally, both types of ELDs must be capable of displaying a standardized ELD data set in the format specified in this rule to an authorized safety official on demand. To ensure that authorized safety officials are always able to receive the HOS data during a roadside inspection, a driver must be able to provide either the display or a printout when an authorized safety official requests a physical display of the information. Display and printouts will each contain the same standardized data set identified in section 4.8.1.3 of the technical specifications. Motor carriers will be able to select an ELD that works for their business needs since both types of ELDs will transfer identical data sets to law enforcement.

4. Enforcement

A driver must submit supporting documents to the driver's employer within 13 days. Today's rule does not require the driver to keep any supporting documents in the vehicle. However, FMCSA notes that any supporting documents that are in a vehicle during a roadside inspection must be shown to an authorized safety official on request.

Authorized safety officials who conduct roadside enforcement activities (*i.e.,* traffic enforcement and inspections) or compliance safety investigations will be able to select a minimum of one method of electronic data transfer from each type of ELD. States will have the option of choosing a minimum of one ''telematics'' electronic data transfer method (wireless Web services or email) and one ''local'' electronic data transfer method (USB 2.0 or Bluetooth) for the electronic transfer of ELD data.

5. Implementation Period

The Agency will make its compliance test available and its Web site available for ELD providers to register and certify ELDs on or shortly following the effective date of today's rule. A motor carrier may then elect to voluntarily use ELDs listed on the Web site. Prior to the rule's effective date, February 16, 2016, the Agency will issue a policy addressing how ELDs will be handled for HOS enforcement purposes during this voluntary period. Beginning on the rule's compliance date, December 18, 2017, the Agency will apply today's rule in its enforcement activities. If a motor carrier elects to voluntarily use ELDs in advance of the rule's compliance date, the provisions of the rule prohibiting harassment of drivers apply. However, those motor carriers that have installed a compliant AOBRD before the compliance date will have the option to continue using an AOBRD through December 16, 2019.

The supporting document provisions of today's rule also take effect as of the rule's compliance date. The effective date of provisions addressing harassment is tied to the use of an ELD.

B. Regulatory History

For a more extensive regulatory history and background of electronic logging device regulations, please see the April 5, 2010 Final Rule (75 FR 17208), February 1, 2011 NPRM (76 FR 5537), and the March 28, 2014 SNPRM (79 FR 17656). See also the table titled, ''Timeline of Regulatory and Judicial Actions after 2010 Related to this Rulemaking,'' in Section IV, F, below.

The 2010 EOBR 1 rule established technical specifications for an electronic logging device, but the rule concerned only remedial and voluntary use of EOBRs (75 FR 17208, Apr. 5, 2010). The rule would have required that motor carriers with demonstrated serious noncompliance with the HOS rules be subject to mandatory installation of EOBRs meeting the new performance standards included in the 2010 rule. If FMCSA determined, based on HOS records reviewed during a compliance review, that a motor carrier had a 10 percent or greater violation rate (''threshold rate violation'') for any HOS regulation listed in a new Appendix C to part 385, FMCSA would have issued the carrier an EOBR remedial directive. The motor carrier would then have been required to install EOBRs in all of its CMVs regardless of their date of manufacture and use the devices for HOS recordkeeping for a period of 2 years, unless the carrier (i) already equipped its vehicles with AOBRDs meeting the Agency's current requirements under 49 CFR 395.15 prior to the finding, and (ii) demonstrated to FMCSA that its drivers understand how to use the devices. At that time, the Agency estimated that the remedial directive aspect of 2010 rule would be applicable to about 2,800 motor carriers in the first year and 5,700 motor carriers each year thereafter.

The 2010 rule would have also changed the safety fitness standard to take into account a remedial directive when determining fitness. Additionally, to encourage industry-wide use of EOBRs, FMCSA revised its compliance review procedures to permit examination of a random sample of drivers' records of duty status after the initial sampling, and provided partial relief from HOS supporting documents requirements, if certain conditions were satisfied, for motor carriers that voluntarily use compliant EOBRs.

On February 1, 2011, FMCSA published an NPRM to expand the electronic logging requirements from the 2010 rule to a much broader population of motor carriers (76 FR 5537). There were several opportunities for public input, including a notice inviting comment on the issue of harassment, public listening sessions, MCSAC meetings,[4] and an online commenting system pilot program called Regulation Room.[5]

In June 2010, the Owner-Operator Independent Drivers Association (OOIDA) filed a petition in the U.S. Court of Appeals for the Seventh Circuit seeking a review of the 2010 rule (*Owner-Operator Indep. Drivers Ass'n* v. *Fed. Motor Carrier Safety Admin.,* 656 F.3d 580 (7th Cir. 2011) (decision available in the docket for this rulemaking)). On August 26, 2011, the Seventh Circuit vacated the April 2010 rule. The court held that, contrary to a statutory requirement, the Agency failed to address the issue of driver harassment.[6]

On February 13, 2012, FMCSA announced its intent to move forward with an SNPRM that would propose technical standards for electronic logging devices, address driver harassment issues, and propose revised requirements on HOS supporting documents (77 FR 7562). Additionally, the Agency stated it would hold public listening sessions and task the MCSAC to make recommendations related to the proposed rulemaking.

On May 14, 2012, FMCSA published a rule (77 FR 28448) to rescind both the April 5, 2010, rule (75 FR 17208) and subsequent corrections and modifications to the technical specifications (75 FR 55488, Sept. 13, 2010), in response to the Seventh Circuit's decision to vacate the 2010 EOBR rule.

As a result of the Seventh Circuit's vacatur, the technical specifications that were to be used in the 2011 NPRM were rescinded. Because the requirements for AOBRDs were not affected by the Seventh Circuit's decision, motor carriers relying on electronic devices to monitor HOS compliance are currently governed by the Agency's rules regarding the use of AOBRDs in 49 CFR 395.15, originally published in 1988. There are no new standards currently in effect to replace these dated technical specifications. Furthermore, because the entire rule was vacated, FMCSA was unable to grant relief from supporting document requirements to motor carriers voluntarily using EOBRs.[7]

FMCSA proposed new technical standards for ELDs and requiring the

[4] The MCSAC provides advice and recommendations to the Administrator of FMCSA on motor carrier safety programs and motor carrier safety regulations. MCSAC members are appointed by the Administrator for two-year terms and includes representatives of the motor carrier safety advocacy, safety enforcement, industry, and labor communities.

[5] The Regulation Room is available on line at: *http://archive.regulationroom.org/eobr*, last accessed January 2, 2015.

[6] 656 F.3d at 589. At the time of the court's decision, 49 U.S.C. 31137(a) read as follows: ''Use of Monitoring Devices.—If the Secretary of Transportation prescribes a regulation about the use of monitoring devices on commercial motor vehicles to increase compliance by operators of the vehicles with hours of service regulations of the Secretary, the regulation shall ensure that the devices are not used to harass vehicle operators. However, the devices may be used to monitor productivity of the operators.'' MAP–21 revised section 31137, which no longer expressly refers to ''productivity.'' However, FMCSA believes that, as long as an action by a motor carrier does not constitute harassment that would be prohibited under this rulemaking, a carrier may legitimately use the devices to improve productivity or for other appropriate business practices.

[7] The Agency's June 2010 guidance, ''Policy on the Retention of Supporting Documents and the Use of Electronic Mobile Communication/Tracking Technology,'' which granted certain motor carriers limited relief from the requirement to retain certain supporting documents, was not affected by the Seventh Circuit decision.

use of ELDs on March 28, 2014 in the SNPRM (79 FR 17656). These technical standards were in response to the vacatur of the 2010 rule, the MCSAC's recommendations (December 16, 2011 and February 8, 2012 reports), the public listening sessions (March 12, 2012 and April 26, 2012), and the enactment of MAP–21. The Agency also proposed new requirements for supporting documents and ways to ensure that ELDs are not used to harass drivers. The regulatory text proposed in the 2014 SNPRM superseded the regulatory text proposed in the 2011 NPRM.

FMCSA conducted a study of the potential for safety benefits with the use of ELDs, and published the results of this study in the docket on May 12, 2014.

FMCSA also conducted a survey of drivers and motor carriers concerning the potential for the use of ELDs to result in harassment, and docketed the results of this survey on November 13, 2014.

C. Provisions of Previous Rulemaking Proposals That Are Not Included in Today's Rule

1. Supporting Document Provisions

A number of provisions relating to a motor carrier's obligations concerning supporting documents that were included in the 2011 NPRM were not re-proposed in the SNPRM. For example, given the comments received in response to the NPRM and additional information brought to the Agency's attention, FMCSA decided not to require an HOS management system as part of this rulemaking.

The NPRM also proposed that a single supporting document would be sufficient for the beginning and end of each ODND period if that document contained the required elements. In addition, the NPRM also proposed a motor carrier to certify the lack of any required supporting document for prescribed periods. Given commenters overwhelming opposition to the HOS Management System, these requirements were not re-proposed in the 2014 SNPRM and are not included in the final rule.

It is a paramount responsibility, however, of all motor carriers to monitor their drivers' HOS compliance. As explained in prior administrative decisions of the Agency, a motor carrier has an obligation to verify HOS compliance of its drivers (See, *e.g., In the Matter of Stricklin Trucking Co., Inc.,* Docket No. *FMCSA–2011–0127–0013, at 10–13 (Order on Reconsideration* Mar. 20, 2012)).[8] Motor carriers have a duty to ensure that their drivers are complying with the requirements and prohibitions imposed on them in the HOS regulations, just as they are responsible for complying with other elements of the FMCSRs. The elimination of the HOS Management System proposed in the NPRM does not alter this obligation.

The Agency eliminated the suggestion that a single supporting document could satisfy the motor carrier's obligation. The Agency agreed with comments submitted at the NPRM stage that this suggestion was not realistic and did not include it in the SNPRM. Similarly, the Agency eliminated the requirement that a motor carrier certify the unavailability of supporting documents based on comments received in response to the NPRM.

2. Technical Specifications

The 2011 NPRM relied upon the technical specifications in the EOBR 1 rule, which the Seventh Circuit vacated and which are now obsolete. The 2014 SNPRM proposed new technical specifications, and today's rule makes some modifications to those technical specifications. Below is a comparison of the technical specifications in the existing 1988 AOBRD rule, the 2010 EOBR 1 rule, the 2014 SNPRM, and today's rule. Motor carriers that have installed compliant AOBRDs before the compliance date of today's rule (2 years from today's publication date) may continue use of these devices for an additional 2 years after the compliance date.

TABLE 3—COMPARISON OF TECHNICAL SPECIFICATIONS

Feature/Function	1988 AOBRD Rule	2010 EOBR Rule	2014 ELD SNPRM	Today's ELD Final rule
Integral Synchronization.	Integral synchronization required, but term not defined in the FMCSRs.	Integral synchronization required, defined to specify signal source internal to the CMV.	Integral synchronization with the CMV engine,* to automatically capture engine power status, vehicle motion status, miles driven, engine hours.*. For model year 2000 and later, interfacing with engine control module (ECM).	Integral synchronization interfacing with the CMV engine ECM, to automatically capture engine power status, vehicle motion status, miles driven, engine hours. (CMVs older than model year 2000 exempted).
Recording Location Information.	Required at each change of duty status. Manual or automated.	Require automated entry at each change of duty status and at 60-minute intervals while CMV in motion.	Require automated entry at each change of duty status, at 60-minute intervals while CMV is in motion, at engine-on and engine-off instances, and at beginning and end of personal use and yard moves.	Require automated entry at each change of duty status, at 60-minute intervals while CMV is in motion, at engine-on and engine-off instances, and at beginning and end of personal use and yard moves.

[8] Available at *http://www.regulations.gov*.

TABLE 3—COMPARISON OF TECHNICAL SPECIFICATIONS—Continued

Feature/Function	1988 AOBRD Rule	2010 EOBR Rule	2014 ELD SNPRM	Today's ELD Final rule
Graph Grid Display.	Not required—"time and sequence of duty status changes".	Not required on EOBR, digital file to generate graph grid on enforcement official's portable computer.	An ELD must be able to present a graph grid of driver's daily duty status changes either on a display or on a printout.	An ELD must be able to present a graph grid of driver's daily duty status changes either on a display or on a printout.
HOS Driver Advisory Messages.	Not addressed	Requires notification at least 30 minutes before driver reaches 24-hour and 7/8 day driving and on-duty limits.	HOS limits notification *not* required.. "Unassigned driving time/miles" warning provided upon login.	HOS limits notification *not* required. "Unassigned driving time/miles" warning provided upon login.
Device "Default" Duty Status.	Not addressed	On-duty not driving when the vehicle is stationary (not moving and the engine is off) 5 minutes or more.	On-duty not driving, when CMV has not been in-motion for 5 consecutive minutes, and driver has not responded to an ELD prompt within 1 minute. *No other non-driver-initiated status change is allowed.*	On-duty not driving, when CMV has not been in-motion for 5 consecutive minutes, and driver has not responded to an ELD prompt within 1 minute. *No other non-driver-initiated status change is allowed.*
Clock Time Drift	Not addressed	Absolute deviation from the time base coordinated to (UTC) Coordinated Universal Timeshall not exceed 10 minutes at any time.	ELD time must be synchronized to UTC, absolute deviation must not exceed 10 minutes at any point in time.	ELD time must be synchronized to UTC, absolute deviation must not exceed 10 minutes at any point in time.
Communications Methods.	Not addressed—focused on interface between AOBRD support systems and printers.	*Wired:* USB 2.0 implementing Mass Storage Class 08H for driverless operation.. *Wireless:* IEEE 802.11g, CMRS	*Primary:* Wireless Web services or Bluetooth 2.1 or Email (SMTP) or Compliant Printout. *Backup Wired/Proximity:* USB 2.0 * and (Scannable QR codes, or TransferJet *). * Except for "printout alternative".	*Two Options: 1-Telematics:* As a minimum, the ELD must transfer data via both wireless Web services and wireless email *2-"Local Transfer":* As a minimum, the ELD must transfer data via both USB 2.0 and Bluetooth. Both types of ELDs must be capable of displaying a standardized ELD data set to authorized safety officials via display or printout.
Resistance to Tampering.	AOBRD and support systems, must be, to the maximum extent practical, tamperproof.	Must not permit alteration or erasure of the original information collected concerning the driver's HOS, or alteration of the source data streams used to provide that information.	ELD must not permit alteration or erasure of the original information collected concerning the driver's ELD records or alteration of the source data streams used to provide that information. ELD must support data integrity check functions.	ELD must not permit alteration or erasure of the original information collected concerning the driver's ELD records or alteration of the source data streams used to provide that information. ELD must support data integrity check functions.
Identification of Sensor Failures and Edited Data.	Must identify sensor failures and edited data.	Device/system must identify sensor failures and edited and annotated data when downloaded or reproduced in printed form.	ELD must have the capability to monitor its compliance (engine connectivity, timing, positioning, etc.) for detectable malfunctions and data inconsistencies. ELD must record these occurrences.	ELD must have the capability to monitor its compliance (engine connectivity, timing, positioning, etc.) for detectable malfunctions and data inconsistencies. ELD must record these occurrences.

D. Coordination With the U.S. Department of Labor

FMCSA has worked with the U.S. Department of Labor to clarify and reinforce the procedures of both agencies, including those pertaining to harassment. The Department of Labor administers the whistleblower law enacted as part of the Surface Transportation Assistance Act (49 U.S.C. 31105). FMCSA and the Department of Labor have previously consulted on particular cases or referred drivers to the appropriate agency based on the nature of the concern. The agencies also have been in communication concerning their respective authorities and complaint procedures and, in the Spring of 2014, entered a memorandum of understanding to facilitate coordination and cooperation between FMCSA and the Occupational Safety and Health Administration concerning statutory provisions addressing retaliation and coercion as well as the exchange of safety and health allegations.[9]

[9] Copy of Memorandum of Understanding available at *https://www.osha.gov/plsoshaweb/owadisp.show_document?p_table=MOU&p_id=1305.*

E. MCSAC Recommendations

Under Task 11–04, FMCSA tasked the MCSAC with clarifying the functionality of communications standards originally adopted in the April 2010 rule, in appendix A to part 395—Electronic On-Board Recorder Performance Specifications.[10] The Agency asked the

[10] Motor Carrier Safety Advisory Committee (MCSAC) Task Statement, Task 11–04, Electronic On-Board Recorders (EOBR) communications protocols, security, interfaces, and display of hours-

Continued

MCSAC to make recommendations on technical subjects to improve the functionality of the information reporting requirements after considering advice from technical experts and input from stakeholders.

The MCSAC created the EOBR Implementation Subcommittee, which met numerous times in late 2011. The MCSAC also held public meetings on August 30–31 and December 5–6, 2011, to discuss the subcommittee's recommendations. In its notice announcing the subcommittee meetings (76 FR 62496, Oct. 7, 2011), FMCSA stated, ''[t]he Agency will consider the MCSAC report in any future rulemaking to reestablish functional specifications for EOBRs.''

The MCSAC report was delivered to the Administrator on December 16, 2011.[11] The report consisted of comments on, and recommended changes to, the April 2010 rule and a discussion of issues the committee believed FMCSA should consider while developing the rule. The committee's recommendations focused on: Technical specifications, including required data elements, location data, and device display requirements; and implementation considerations, including grandfather provisions, product certification procedures, and exceptions for early adopters.

Under Task 12–01, FMCSA tasked the MCSAC to present information the Agency should consider as it develops ways to address potential harassment of drivers related to the use of EOBRs. This report was delivered to the Administrator on February 8, 2012.[12] This report addressed a number of issues concerning harassment, including the definition of harassment, complaint procedures, civil penalties, and the potential for harassment by law enforcement.

FMCSA considered the MCSAC recommendations submitted under Task 11–04 and Task 12–01 during the rulemaking process. Many of the new requirements in today's rule are consistent with the MCSAC recommendations.

F. Table Summary

TABLE 4—TIMELINE OF REGULATORY AND JUDICIAL ACTIONS SINCE THE 2010 RULE

Title	Type of action, RIN	Citation, date	Synopsis
Electronic On-Board Recorders for Hours-of-Service Compliance.	Final rule ..... RIN 2126–AA89 ..... Docket No. 2004–18940.	75 FR 17208, Apr. 5, 2010.	Established new performance standards for EOBRs, required EOBRs to be installed in CMVs for motor carriers that have demonstrated serious noncompliance; set incentives for voluntary usage of EOBRs.
Policy on the Retention of Supporting Documents and the Use of Electronic Mobile Communication/Tracking Technology in Assessing Motor Carriers' and Commercial Motor Vehicle Drivers' Compliance With the Hours of Service Regulations.	Notice of Regulatory Guidance and Policy Change.. No RIN. ..... No docket number.	75 FR 32984, June 10, 2010.	Provided notice to the motor carrier industry and the public of regulatory guidance and policy changes regarding the retention of supporting documents and the use of electronic mobile communication/tracking technology in assessing motor carriers' and commercial motor vehicle drivers' compliance with the HOS regulations.
Electronic On-Board Recorders for Hours-of-Service Compliance.	Final rule; Technical amendments, response to petitions for reconsideration,. RIN 2126–AA89 ..... Docket No. 2004–18940.	75 FR 55488, Sept. 13, 2010.	Amended requirements for the temperature range in which EOBRs must be able to operate, and the connector type specified for the USB interface.
Electronic On-Board Recorders and Hours-of-Service Supporting Documents.	NPRM ..... RIN 2126–AB20 ..... Docket No. FMCSA–2010–0167.	76 FR 5537, Feb. 1, 2011.	Required all motor carriers currently required to maintain RODS for HOS recordkeeping to use EOBRs instead; relied on the technical specifications from the April 2010 final rule, and reduced requirements to retain supporting documents.
Electronic On-Board Recorders and Hours-of-Service Supporting Documents.	NPRM; extension of comment period,. RIN 2126–AB20 ..... Docket No. FMCSA–2010–0167.	76 FR 13121, Mar. 10, 2011.	Extended the public comment period for the NPRM from April 4, 2011, to May 23, 2011.
Electronic On-Board Recorders and Hours-of-Service Supporting Documents.	Notice; request for additional public comment. RIN 2126–AB20 ..... Docket No. FMCSA–2010–0167.	76 FR 20611, Apr. 13, 2011.	Expanded the opportunity for the public to comment on the issue of ensuring that EOBRs are not used to harass CMV drivers.
Motor Carrier Safety Advisory Committee (MCSAC) Series of Public Subcommittee Meetings.	Notice of meeting ..... Related to RIN 2126–AA89. Docket No. FMCSA–2006–26367.	76 FR 38268, June 29, 2011.	Announced series of subcommittee meetings on task 11–04, concerning technical specifications for an EOBR as related to the April 2010 final rule.

of-service data during driver/vehicle inspections and safety investigations. Retrieved December 7, 2014, from *http://mcsac.fmcsa.dot.gov/documents/July2011/task_statement_11-04.pdf.*

[11] MCSAC Task 11–04: Electronic On-Board Recorders (EOBR) Communications Protocols, Security, Interfaces, and Display of Hours-of-Service Data During Driver/Vehicle Inspections and Safety Investigations, December 16, 2011. Retrieved December 7, 2014, from *http://mcsac.fmcsa.dot.gov/meeting.htm.*

[12] MCSAC Task 12–01: Measures to Ensure Electronic On-Board Recorders (EOBRs) Are Not Used to Harass Commercial Motor Vehicle (CMV) Drivers, February 8, 2012. Retrieved January 8, 2015, from *http://mcsac.fmcsa.dot.gov/Reports.htm.*

TABLE 4—TIMELINE OF REGULATORY AND JUDICIAL ACTIONS SINCE THE 2010 RULE—Continued

Title	Type of action, RIN	Citation, date	Synopsis
Owner-Operator Indep. Drivers Ass'n v. Fed. Motor Carrier Safety Admin.	Judicial Decision, United States Court of Appeals, Seventh Circuit. Related to RIN 2126–AA89. No docket number	*Owner-Operator Indep. Drivers Ass'n* v. *Fed. Motor Carrier Safety Admin.,* 656 F.3d. 580 (7th Cir. 2011), Aug. 26, 2011	Vacated the April 2010 rule.
Motor Carrier Safety Advisory Committee Series of Public Subcommittee Meetings.	Notice of meetings related to EOBRs. No RIN. ..... Docket No. FMCSA–2006–26367.	76 FR 62496, Oct. 7, 2011.	Oct. 24–27, 2011, subcommittee review of the functional specifications for EOBRs published by FMCSA as part of EOBR final rule
MCSAC: Public Meeting Medical Review Board: Joint Public Meeting With MCSAC.	Notice of meeting ..... Related to RIN 2126–AB20. Docket Nos. FMCSA–2006–26367 and FMCSA–2011–0131.	77 FR 3546, Jan. 24, 2012.	Announced meeting on task 12–01, concerning issues relating to the prevention of harassment of truck and bus drivers through EOBRs.
Electronic On-Board Recorders and Hours-of-Service Supporting Documents.	Notice of intent ..... RIN 2126–AB20 ..... Docket No. FMCSA–2010–0167.	77 FR 7562, Feb. 13, 2012.	Announced FMCSA's intent to go forward with an SNPRM; two public listening sessions; an initial engagement of the MCSAC in this subject matter; a survey of drivers concerning potential for harassment; and a survey for motor carriers and vendors concerning potential for harassment.
Electronic On-Board Recorders and Hours-of-Service Supporting Documents.	Notice of public listening session,. RIN 2126–AB20 ..... Docket No. FMCSA–2010–0167.	77 FR 12231, Feb. 29, 2012.	Announced public listening session held in Louisville, Kentucky on March 23, 2012.
Electronic On-Board Recorders and Hours-of-Service Supporting Documents.	Notice of public listening session. RIN 2126–AB20 ..... Docket No. FMCSA–2010–0167.	77 FR 19589, Apr. 2, 2012.	Announced public listening session held in Bellevue, Washington on April 26, 2012.
Electronic On-Board Recorders for Hours-of-Service Compliance; Removal of Final Rule Vacated by Court.	Final rule ..... RIN 2126–AB45 ..... Docket No. FMCSA–2012–0006.	77 FR 28448, May 14, 2012.	Responded to a decision of the Court of Appeals for the Seventh Circuit that vacated the April 2010 final rule.
Agency Information Collection Activities; New Information Collection Request: Driver and Carrier Surveys Related to Electronic On-Board Recorders (EOBRs), and Potential Harassment Deriving From EOBR Use.	Notice and request for information. No RIN. ..... Docket No. FMCSA–2012–0309.	77 FR 74267, Dec. 13, 2012.	FMCSA submits an Information Collection Request (ICR) to Office of Management and Budget (OMB) for approval. The purpose of this new ICR is to examine by the collection of survey data, the issue of driver harassment and determine the extent to which EOBRs could be used by motor carriers or enforcement personnel to harass drivers and/or monitor driver productivity. The survey will also collect information on the extent to which respondents believe that the use of EOBRs may result in coercion of drivers by motor carriers, shippers, receivers and transportation intermediaries.
Agency Information Collection Activities; Approval of a New Information Collection Request: Driver and Carrier Surveys Related to Electronic Onboard Recorders (EOBRs), and Potential Harassment Deriving From EOBR Use.	Notice and request for comments. No RIN. ..... Docket No. FMCSA–2012–0309.	78 FR 32001, May 28, 2013.	The purpose of this new ICR is to broadly examine, by the collection of survey data, the issue of driver harassment and determine the extent to which EOBRs used to document drivers' HOS could be used by motor carriers or enforcement personnel to harass drivers or monitor driver productivity. The survey will collect information on the extent to which respondents believe that the use of EOBRs may result in coercion of drivers by motor carriers, shippers, receivers, and transportation intermediaries. The proposed surveys for drivers and carriers collect information related to issues of EOBR harassment of drivers by carriers. FMCSA plans to publish a supplemental notice of proposed rulemaking on EOBRs.

TABLE 4—TIMELINE OF REGULATORY AND JUDICIAL ACTIONS SINCE THE 2010 RULE—Continued

Title	Type of action, RIN	Citation, date	Synopsis
Electronic Logging Devices and Hours of Service Supporting Documents.	Supplemental notice of proposed rulemaking; request for comments. RIN 2126–AB20 ..... Docket No. FMCSA–2010–0167.	79 FR 17656, Mar. 28, 2014.	Proposed minimum performance and design standards for HOS ELDs, mandated their use by drivers currently required to keep RODS, proposed clarifying and specified HOS supporting document retention requirements; and included measures to address concerns about harassment resulting from the mandatory use of ELDs.
Electronic Logging Devices and Hours of Service Supporting Documents.	Evaluating the Potential Safety Benefits of Electronic Hours-of-Service Recorders; Notice of availability of research report. RIN 2126–AB20 ..... Docket No. FMCSA–2010–0167.	79 FR 27040, May 12, 2014.	Announced the availability of a new final report, ''Evaluating the Potential Safety Benefits of Electronic Hours-of-Service Recorders.'' The study quantitatively evaluated whether trucks equipped with Electronic Hours-of-Service Recorders (EHSRs) have a lower (or higher) crash and hours-of-service (HOS) violation rate than those without EHSRs.
Coercion of Commercial Motor Vehicle Drivers; Prohibition.	NPRM ..... RIN 2126–AB57 ..... Docket No. FMCSA–2012–0377.	79 FR 27265, May 13, 2014.	FMCSA proposes regulations that prohibit motor carriers, shippers, receivers, or transportation intermediaries from coercing drivers to operate CMVs in violation of certain provisions of the FMCSRs—including HOS limits and the Commercial Driver's License (CDL) regulations and associated drug and alcohol testing rules—or the Hazardous Materials Regulations. In addition, the NPRM would prohibit anyone who operates a CMV in interstate commerce from coercing a driver to violate the commercial regulations.
Electronic Logging Devices and Hours of Service Supporting Documents.	Supplemental notice of proposed rulemaking; extension of comment period. RIN 2126–AB20 ..... Docket No. FMCSA–2010–0167.	79 FR 28471, May 16, 2014.	Extended the public comment period for the Agency's March 28, 2014 SNPRM until June 26, 2014.
Agency Information Collection Activities; New Information Collection Request: Electronic Logging Device Vendor Registration.	Notice and Request for Comments. No RIN ..... Docket No.: FMCSA–2014–0377.	79 FR 642848, Oct. 28, 2014.	Invited public comment on the approval of a new information collection request entitled, Electronic Logging Device Vendor Registration. This ICR will enable manufacturers of ELDs to register with FMCSA.
Electronic Logging Devices and Hours of Service Supporting Documents; Research Report on Attitudes of Truck Drivers and Carriers on the Use of Electronic Logging Devices and Driver Harassment.	Notice of Availability of Research Report. RIN 2126–AB20 ..... Docket No. FMCSA–2010–0167.	79 FR 67541, Nov. 13, 2014.	Announced the availability of a new report: ''Attitudes of Truck Drivers and Carriers on the Use of Electronic Logging Devices and Driver Harassment.'' This project surveyed drivers on their attitudes regarding carrier harassment and examined whether reported harassment experiences varied due to the hours-of service logging method used by the driver.
Agency Information Collection: Activities; New Information Collection Request: Electronic Logging Device (ELD) Registration.	Notice and Request for Comments. No RIN ..... Docket No. FMCSA–2014–0377.	80 FR 18295, Apr. 3, 2015.	Announced the FMCSA plan to submit the Information Collection Request (ICR) described below to the Office of Management and Budget for its review, and invited public comment on the approval of a new ICR entitled, Electronic Logging Device Registration to enable providers to register their ELDs with FMCSA.
Coercion of Commercial Motor Vehicle Drivers; Prohibition.	Final Rule ..... RIN 2126–AB57 ..... Docket No. FMCSA–2012–0377.	80 FR 74695, Nov. 30, 2015.	Prohibits motor carriers, shippers, receivers, or transportation intermediaries from coercing drivers to operate CMVs in violation of certain provisions of the FMCSRs. Prohibits anyone who operates a CMV in interstate commerce from coercing a driver to violate the commercial regulations.

V. Legal Basis for the Rulemaking

FMCSA's authority for this rulemaking is derived from several statutes, which are discussed below.

A. Motor Carrier Act of 1935

The Motor Carrier Act of 1935 (Pub. L. 74–255, 49 Stat. 543, August 9, 1935), as amended, (the 1935 Act) provides that, ''[t]he Secretary of Transportation may prescribe requirements for—(1) qualifications and maximum hours of service of employees of, and safety of operation and equipment of, a motor carrier; and (2) qualifications and maximum hours of service of employees of, and standards of equipment of, a motor private carrier, when needed to promote safety of operation'' (49 U.S.C. 31502(b)). Among other things, by requiring the use of ELDs, this rule requires the use of safety equipment that will increase compliance with the HOS regulations and address the ''safety of operation'' of motor carriers subject to this statute. This will result through the automatic recording of driving time and a more accurate record of a driver's work hours.

B. Motor Carrier Safety Act of 1984

The Motor Carrier Safety Act of 1984 (Pub. L. 98–554, Title II, 98 Stat. 2832, October 30, 1984) (the 1984 Act), as amended, provides authority to the Secretary of Transportation (Secretary) to regulate drivers, motor carriers, and vehicle equipment. It requires the Secretary to prescribe minimum safety standards for CMVs to ensure that—(1) CMVs are maintained, equipped, loaded, and operated safely; (2) responsibilities imposed on CMV drivers do not impair their ability to operate the vehicles safely; (3) drivers' physical condition is adequate to operate the vehicles safely; (4) the operation of CMVs does not have a deleterious effect on drivers' physical condition; and (5) CMV drivers are not coerced by a motor carrier, shipper, receiver, or transportation intermediary to operate a CMV in violation of regulations promulgated under 49 U.S.C. 31136 or under chapter 51 or chapter 313 of 49 U.S.C. (49 U.S.C. 31136(a)). The 1984 Act also grants the Secretary broad power in carrying out motor carrier safety statutes and regulations to ''prescribe recordkeeping and reporting requirements'' and to ''perform other acts the Secretary considers appropriate'' (49 U.S.C. 31133(a)(8) and (10)).

The HOS regulations are designed to ensure that driving time—one of the principal ''responsibilities imposed on the operators of commercial motor vehicles''—does ''not impair their ability to operate the vehicles safely'' (49 U.S.C. 31136(a)(2)). ELDs that are properly designed, used, and maintained will enable drivers, motor carriers, and authorized safety officials to more effectively and accurately track on-duty driving hours, thus preventing both inadvertent and deliberate HOS violations. Driver and motor carrier compliance with the HOS rules helps ensure that drivers are provided time to obtain restorative rest and thus that ''the physical condition of [CMV drivers] is adequate to enable them to operate the vehicles safely'' (49 U.S.C. 31136(a)(3)). Indeed, the Agency considered the rulemaking's impact on driver health under 49 U.S.C. 31136(a)(3) and (a)(4), as discussed in the Environmental Assessment, available in the docket for this rulemaking.

By ensuring ELDs are tamper-resistant, this rulemaking will help protect against coercion of drivers (49 U.S.C. 31136(a)(5)). The ELD will decrease the likelihood that driving time, which will be captured automatically by the device, could be concealed and that other duty status information entered by the driver could be inappropriately changed after it is entered. Thus, motor carriers will have limited opportunity to force drivers to violate the HOS rules without leaving an electronic trail that would point to the original and revised records.

This rule also prohibits motor carriers from coercing drivers to falsely certify their ELD records (49 CFR 395.30(e)). FMCSA recently adopted a rule that defines ''coerce'' or ''coercion'' and prohibits the coercion of drivers (49 CFR 390.5 and 390.6, respectively) (80 FR 74695, November 30, 2015).

Because the rule will increase compliance with the HOS regulations, which are intended to prevent driver fatigue, it will have a positive effect on the physical condition of drivers and help to ensure that CMVs are operated safely (49 U.S.C. 31136(a)(1)). Other requirements in 49 U.S.C. 31136(a)(1) concerning safe motor vehicle maintenance, equipment, and loading are not germane to this rule because ELDs and the rulemaking's related provisions influence driver operational safety rather than vehicular and mechanical safety.

C. Truck and Bus Safety and Regulatory Reform Act

Section 9104 of the Truck and Bus Safety and Regulatory Reform Act (Pub. L. 100–690, 102 Stat. 4181, 4529, November 18, 1988) anticipated the Secretary promulgating a regulation about the use of monitoring devices on CMVs to increase compliance with HOS regulations. The statute, as amended, required the Agency to ensure that such devices were not used to ''harass a vehicle operator.'' This provision was further amended by MAP–21, providing that regulations requiring the use of ELDs, ensure that ELDs not be used to harass drivers. See the discussion of MAP–21, below, and the discussion of comments related to harassment in Section IX.

D. Hazardous Materials Transportation Authorization Act of 1994

Section 113 of the Hazardous Materials Transportation Authorization Act of 1994 (Pub. L. 103–311, 108 Stat. 1673, 16776–1677, August 26, 1994) (HMTAA) requires the Secretary to prescribe regulations to improve compliance by CMV drivers and motor carriers with HOS requirements and the efficiency of Federal and State authorized safety officials reviewing such compliance. Specifically, the Act addresses requirements for supporting documents. The cost of such regulations must be reasonable to drivers and motor carriers. Section 113 of HMTAA describes what elements must be covered in regulation, including a requirement that the regulations specify the ''number, type, and frequency of supporting documents that must be retained by the motor carrier'' and a minimum retention period of at least 6 months.

Section 113 also requires that regulations ''authorize, on a case-by-case basis, self-compliance systems'' whereby a motor carrier or a group of motor carriers could propose an alternative system that would ensure compliance with the HOS regulations.

The statute defines ''supporting document,'' in part, as ''any document . . . generated or received by a motor carrier or commercial motor vehicle driver in the normal course of business . . .'' This rule does not require generation of new supporting documents outside the normal course of the motor carrier's business. It addresses supporting documents that a motor carrier needs to retain consistent with the statutory requirements. The provisions addressing supporting documents are also discussed in Section VIII of this preamble.

E. MAP–21

Section 32301(b) of the Commercial Motor Vehicle Safety Enhancement Act, enacted as part of MAP–21 (Pub. L. 112–141, 126 Stat. 405, 786–788, July 6, 2012), mandated that the Secretary adopt regulations requiring that CMVs involved in interstate commerce,

operated by drivers who are required to keep RODS, be equipped with ELDs.[13] The statute sets out provisions that the regulations must address, including device performance and design standards and certification requirements. In adopting regulations, the Agency must consider how the need for supporting documents might be reduced, to the extent data is captured on an ELD, without diminishing HOS enforcement.

The statute also addresses privacy protection and use of data. Section 32301(b) of MAP–21 requires the regulations to ''ensur[e] that an electronic logging device is not used to harass a vehicle operator.'' Among other protections, the rule protects drivers from being harassed by motor carriers that are using information available through an ELD, resulting in a violation of § 392.3 or part 395 of 49 CFR, and minimizes the likelihood of interruptions during a driver's sleeper berth period. In doing so, this rule also furthers the provisions of 49 U.S.C. 31136(a), protecting a driver's health.

Finally, as noted above, MAP–21 amended the 1984 Act to add new 49 U.S.C. 31136(a)(5), requiring that FMCSA regulations address coercion of drivers. Although there may be instances where claims of coercion and harassment might overlap, in enacting MAP–21, Congress addressed the issues separately and each regulatory violation has distinct elements. A motor carrier can only be found to have committed harassment if the driver commits a specified underlying violation based on the carrier's actions and there is a nexus to the ELD. Adverse action against the driver is not required because the driver complied with the carrier's instructions. In contrast, coercion is much broader in terms of entities covered and addresses the threat to withhold work from or take adverse employment action against a driver in order to induce the driver to violate a broader range of regulatory provisions or to take adverse action to punish a driver for the driver's refusal to operate a CMV is violation of the specified regulations.

VI. Discussion of Comments—Overview

In today's rule, FMCSA responds to comments in public docket FMCSA–2010–0167, which includes comments submitted in response to the following **Federal Register** notices:

- February 1, 2011, NPRM
- April 13, 2011, Notice, request for additional public comment concerning harassment associated with electronic recording of HOS duty status
- March 28, 2014, SNPRM
- May 12, 2014, Notice of Availability concerning the Agency's research report evaluating the potential safety benefits of ELDs
- November 13, 2014, Notice of Availability concerning the Agency's research report about harassment and its relationship to ELDs

The docket also includes transcripts of comments received at two public listening sessions held in Louisville, Kentucky on March 23, 2012, and Bellevue, Washington on April 26, 2012.[14]

In the 2014 SNPRM, the Agency stated that the proposed regulatory text should be read to replace that proposed in the 2011 NPRM. Some issues in the NPRM were addressed at the SNPRM stage. FMCSA discusses comments to the 2011 NPRM that remain relevant to this rulemaking in the appropriate sections of this comment summary. However, the Agency generally does not address comments to the 2011 NPRM that have been rendered obsolete by changes in the Agency's proposal and events subsequent to the 2011 NPRM, such as the enactment of MAP–21, or that were also submitted to the SNPRM. Obsolete provisions are discussed in Section IV, Overview, above. Similarly, we do not generally respond to comments related to cost and benefit assumptions that the Agency relied on in the NPRM because the SNPRM and this rule largely rely on different data and methodologies.

At the NPRM stage, FMCSA and the Department of Transportation (DOT) participated in a pilot program intended to increase effective public involvement in this rulemaking by using the Cornell eRulemaking Initiative, called ''Regulation Room.'' Regulation Room is not an official DOT Web site; therefore, a summary of discussions introduced in Regulation Room was prepared collaboratively on the site and submitted to DOT as a public comment to the docket. Regulation Room commenters were informed that they could also submit individual comments to the rulemaking docket.

A. Terminology in This Rulemaking

1. A Note on the Terms ''EOBR,'' ''EOBR Technology,'' and ''ELD'' as Used by Commenters

To the best of the Agency's knowledge, no devices or technologies for HOS compliance in the marketplace to date comply fully with the vacated § 395.16 requirements. However, the characteristics of many systems and devices probably came very close to meeting those requirements, and may have been able to become fully compliant with some relatively minor technological changes. Despite this, many commenters referred to ''existing EOBRs,'' and referenced specific makes and models of EOBR-like (ELD-like) devices and systems. FMCSA does not refer to devices or systems discussed by commenters by brand name in this rule. In these responses to comments, the Agency considers the term ''EOBR'' or ''electronic on-board recorder'' to mean a device or a technology that would cover both HOS data recording and storage systems, but acknowledges that the devices commented upon might not actually be compliant with the technical specifications of today's rule.

MAP–21 defines ''electronic logging device'' or ''ELD'' as a device that ''is capable of recording a driver's hours of service and duty status accurately and automatically; and meets the requirements established by the Secretary through regulation.'' 49 U.S.C. 31137(f)(1). The Agency previously used the term ''electronic on-board recorder'' to refer to this category of HOS recording device and its support system. However, to achieve consistency with MAP–21, the Agency now refers to devices that meet today's final rule's technical specifications as ''ELDs.'' FMCSA may retain the use of the term ''EOBR,'' as appropriate, in the context of comments.

Technically there are only ''ELD-like'' devices in use today, as an ELD did not exist in regulation before today's rule. The Agency assumes that many ELD-like devices could be made compliant with the ELD rule at relatively low-cost, but existing devices would likely need some modification.

2. Fleet Management Systems

An FMS may include the functions of an ELD, but typically provides communication capabilities that go beyond the defined requirements of today's rule. Commenters often use the term ''ELD'' to refer to what appears to be an FMS. FMCSA may retain the language of the comments, despite the fact that the technologies described exceed the minimum specifications and

[13] In the March 28, 2014 SNPRM, the term ''electronic logging device (ELD)'' was substituted for the term ''electronic on-board recorder (EOBR),'' which was used in the April 2010 final rule and February 2011 NPRM, in order to be consistent with the term used in MAP–21.

[14] Transcripts of both sessions are available in the docket for this rulemaking, and the Web casts are archived and available at *http://www.tvworldwide.com/events/dot/120323/* and *http://www.tvworldwide.com/events/dot/120426/*, respectively (last accessed May 30, 2013).

definition to be considered an ELD. Today's rule prescribes technical specifications required for a minimally compliant ELD; however, it also addresses communication features available as part of FMS as part of its effort to prevent harassment. Today's rule does not prohibit certain enhanced capabilities that some ELD providers may choose to create, and some motor carriers may elect to employ, consistent with 49 CFR 390.17.

3. ELD Records

In today's rule, FMCSA uses the term ''ELD records'' reflecting the move from paper logs to electronic records recorded on an ELD. The term ''ELD records'' includes all the data elements that must be recorded by an ELD under the technical specifications in the Appendix to subpart B of part 395. The term does not include information that an ELD is not required to record such as supporting documents, including communication records recorded through an FMS. The term is used to describe a type of RODS that are recorded on an ELD and that must be retained by a motor carrier. A definition of ''ELD record'' is added to 49 CFR 395.2 for clarity.

B. An Overview of Comments

1. Comments to the 2011 NPRM

The Agency received 385 unique and germane comments to the NPRM. The Agency received 66 docket submissions that were generally in favor of the 2011 proposal to expand the use of EOBRs; commenters included industry and safety advocacy groups, as well as individuals, motor carriers, and government entities. The six safety advocacy groups that generally supported the 2011 NPRM included Road Safe America; the Insurance Institute for Highway Safety; the Alliance for Driver Safety and Security; and, in a joint filing, the Truck Safety Coalition, Parents Against Tired Truckers, and the Citizens for Reliable and Safe Highways. The National Transportation Safety Board (NTSB) and the Commercial Vehicle Safety Alliance (CVSA) wrote supportive comments, as did the Truckload Carriers Association, the Arkansas Trucking Association, and the American Trucking Associations (ATA). Several individuals and drivers, motor carriers, and owner-operators also supported the rule.

FMCSA received 232 separate comments to the docket that were generally opposed to the proposed rule, particularly concerning the expansion of the EOBR usage requirements. Some commenters responded several times. The Agency heard from drivers or other individuals, including owner-operators, and motor carriers. Six associations also opposed all or certain elements of the proposed rule: OOIDA; the Agricultural Retailers Association; the Joint Poultry Industry Safety and Health Council; and, in a joint filing, the Air and Expedited Motor Carriers Association, National Association of Small Trucking Companies, and The Expedite Association of North America.

Reasons cited by commenters who opposed the proposed rule included the following:

- The proposal would not improve compliance with the HOS rules
- The proposal would not improve highway safety
- The proposal would impose excessive costs, particularly on small businesses
- The proposed mandated use of EOBRs would be an invasion of privacy
- The proposal did not adequately address protection of drivers from harassment

Comments During Listening Sessions

FMCSA sought public involvement in the rulemaking through two public listening sessions. These sessions occurred at the Mid-America Truck Show in Louisville, Kentucky, on March 23, 2012, and at the CVSA Conference in Bellevue, Washington, on April 26, 2012. The listening sessions were held after the EOBR 1 rule was vacated and after the 2011 NPRM was published. Comments received at these public sessions focused primarily on the topic of harassment.

During the course of these two public listening sessions, FMCSA heard from both commenters present and those participating through the Internet, who offered varied opinions on the implementation and use of EOBRs. Commenters at the listening session in Louisville, Kentucky, included OOIDA officials, drivers, representatives of motor carriers, and owner-operators. The second public listening session in Bellevue, Washington, specifically sought the input of FMCSA's Motor Carrier Safety Assistance Program (MCSAP) agencies because of their role in enforcing the HOS rules and familiarity with EOBR devices and other technical issues. Participants in the Bellevue public listening session included drivers, representatives of transportation-related businesses, representatives of motor carrier industry organizations, authorized safety officials, and Agency representatives.

In addition to the transcripts of the sessions, which are available in the docket to this rulemaking, Web casts are archived at: *http://www.tvworldwide.com/events/dot/120323/* and *http://www.tvworldwide.com/events/dot/120426/*, respectively. The comments made at these listening sessions are incorporated into the comments addressed here.

2. Comments to the 2014 SNPRM

FMCSA received 1,750 unique and germane comments to the SNPRM.

Comments Generally in Support of the SNPRM

More than 200 commenters expressed general support for the SNPRM. In addition, the Agency received a submission from the Karth family providing a copy of ''The AnnaLeah & Mary Karth Petition: STAND UP FOR TRUCK SAFETY,'' which had 11,389 electronic signatures as of May 27, 2014, when it was submitted to the docket. Some of the commenters who expressed general support had additional comments or reservations that FMCSA discusses in the relevant sections elsewhere in this comment summary. A number of motor carriers, providers of FMSs and related technologies, trade associations, and labor unions stated their general support for the goals of the rulemaking. Safety advocacy organizations generally supported a requirement for ELDs. The Truck Safety Coalition, Parents Against Tired Truckers, and Citizens for Reliable and Safe Highways, responding together, noted some concerns, but indicated their organizations and the safety community support the rulemaking.

The California Highway Patrol (CHP) supported FMCSA's efforts to document driver HOS and duty status via ELDs. The NTSB supported expanding the number of motor carriers and drivers required to use ELDs and indicated that it is vitally important that FMCSA expeditiously issue a final rule to increase compliance with HOS regulations and prevent future crashes, injuries, and deaths.

Individual commenters wrote that they supported ELDs because they make keeping logs easier, there is less paperwork, and logs are orderly, clear, and accurate. Some commenters wrote that ELDs make both drivers and motor carriers operate legally and hold both accountable for compliance. Commenters also noted that ELDs will speed up roadside inspections and simplify enforcement.

Comments Generally Opposed to the SNPRM

FMCSA received 1,357 comments that expressed general opposition to the

SNPRM. FMCSA describes many of these comments in more detail in other parts of the response to comments, but the most commonly cited reasons are discussed below.

Unless laws are written to protect drivers and carriers, Freightlines of America, Inc. commented that brokers, shippers, receivers, corporations, and customers will use ELDs and the HOS rules to deduct pay or not pay at all for a load, jeopardizing safety and lives. The U.S. Poultry & Egg Association, National Chicken Council, and National Turkey Federation, responding together, did not believe that motor carriers that successfully monitor HOS with paper logs should be required to incur the expense of electronic recorders. The National Propane Gas Association (NPGA), Klapec Trucking Company (Klapec), and the Pennsylvania Propane Gas Association believed installation of ELDs should be on a voluntary basis only. The California Construction Trucking Association believed that motor carrier management and owner-operators should be free to choose how to implement safety management practices suited to their particular operations.

Numerous commenters objected to the rule, indicating that the government is overreaching, that there is too much regulation, and that the ELD impinges on privacy and freedom. Some believed that FMCSA would require ELDs for reasons that have nothing to do with safety, for example, to make money from carriers and drivers. OOIDA believed that the use of ELDs would have wide-ranging and negative implications for the health, privacy, safety, and economic interests of all U.S.-domiciled truck drivers and motor carriers.

Many commenters wrote that ELDs would be a financial burden, particularly for small motor carriers, and would drive small carriers out of business. The Agricultural Retailers Association and NPGA believed an ELD mandate is an unnecessary expense—with little to no safety benefits. Some wrote that ELDs would cause prices to rise and slow the economy. Some commenters objected to the costs of the ELD being the responsibility of the driver or motor carrier; some suggested that FMCSA should pay for ELDs. Commenters wrote that they would have to keep paper logs as well, in case the ELD failed.

Commenters also stated that ELDs would benefit only large carriers, or provide more benefits for large carriers than small carriers. These commenters believed big corporations would get discounts on ELDs. Commenters believed that ELDs would give big carriers economic advantages, and some accused FMCSA of requiring ELDs in order to eliminate small carriers. Many commenters wrote that one of the costs of ELDs would be a driver shortage, and many wrote that they would leave the driving industry if ELDs were required.

Many commenters wrote that the ELD would not improve safety, security, or compliance. Commenters complained that carriers with ELDs have a disproportionate number of crashes and high Safety Management System scores—more than carriers without ELDs. They provided examples of the Safety Management System scores of a number of major carriers (Schneider, National, J. B. Hunt, Swift, U.S. Xpress, Knight). Commenters believed that a June 2014 CMV crash involving a Walmart truck on the New Jersey Turnpike was equipped with an AOBRD. They argued that the incident is proof that ELDs do not prevent crashes. Commenters said that the ELD does not enhance compliance—ELDs can only prove driving time, not ODND, off duty, or sleeper berth time—and each duty status can be falsely entered. One commenter wrote that the Agency would have no additional manpower to enforce the ELD rules. Many commenters reported that authorized safety officials often fail to inspect trucks with AOBRDs.

Many commenters opposed ELDs because they would enforce the existing HOS rules and eliminate existing ''flexibility.'' They believed that ELDs would contribute to stress, bad diet, and ill health when used to enforce the 14-hour rule. They alleged that trucks with ELDs speed through construction zones, parking lots, and fueling stations. Commenters also believed that the use of ELDs would result in congested traffic and a scarcity of truck parking locations by forcing strict compliance with the HOS rules.

Commenters stated that the ELD would contribute to driver harassment because ELDs enable motor carriers to push drivers to their driving and on-duty time limits.

Many commenters wrote that training—not ELDs—will provide safety, and FMCSA should pursue long overdue driver training programs. Commenters maintained that big carriers need ELDs because they hire undertrained drivers.

More Data Needs To Be Collected and Analyzed

The George Washington University Regulatory Studies Center pointed out that FMCSA conducts regular roadside inspections that should produce data by which the Agency can measure compliance with HOS limits and associated safety benefits. While some links cannot be directly measured (*e.g.,* whether compliance with HOS regulations will actually reduce driver fatigue), the extent to which the predicted safety benefits of the ELD mandate are accurate should be measurable with data from roadside inspections and accident reports. George Washington University recommended that FMCSA explicitly commit to measuring the actual results of the regulation on an annual basis.

An individual commenter stated that independent research not related to the government will provide detailed information about, and answers to, the e-log problem. The commenter pointed to crashes involving all companies, large and small, and stated that the Agency did not completely research all factors in detail.

3. FMCSA Response

FMCSA describes and responds to many of these comments in more detail in other parts of the response to comments. However, FMCSA agrees with commenters who believe ELDs will help to reduce fatigue and fatigue-related crashes.

The use of ELDs will make it easier for drivers to accurately capture their duty status and make it more difficult for individuals who currently do not routinely achieve high levels of compliance with the HOS rules to produce inaccurate records. The ELD will provide increased transparency and a record that is created automatically of some data elements, as well as a record of any human authorship and editing. While commenters pointed out that there can still be falsification of time spent ODND, FMCSA believes that the opportunities for such fraud are drastically reduced when vehicles are equipped with ELDs. Automatic recording of all times when the CMV is moving and regular recording of geolocation data and other data elements will help both employers and authorized safety officials with HOS oversight, as those elements cannot be easily manipulated. FMCSA believes that ELD use will lead to increased compliance and beneficial behavior changes in commercial driving.

FMCSA notes that preventing fatigued operation of CMVs is a complex challenge and achieving increased compliance with the HOS rules is only one component of the problem. This rule addresses the role of HOS non-compliance while the Agency's work with government and industry leaders in launching the North American Fatigue Management Program (*http://*

www.nafmp.com/en/) is intended to address other components related to overall work-rest schedules, and balancing family and work life in a manner that enables the driver to rest during off-duty periods.

With regard to comments about flexibility, today's final rule concerns ELDs and supporting documents and does not involve any changes to the underlying HOS requirements or the various duty status options available under the HOS rules. Therefore, the use of ELDs does not preclude any of the flexibility provided under the HOS rules, such as the use of the CMV for personal conveyance.

And in response to the comments from George Washington University, FMCSA will conduct a regulatory effectiveness study at an appropriate time following the compliance date. The Agency will then be in a position to compare HOS violation rates in the years prior to the ELD mandate and during the years that follow implementation of the ELD mandate.

FMCSA addresses the relationship of ELDs and crashes in the discussion of its research. FMCSA discusses the benefits of ELD use elsewhere in this preamble.

VII. Discussion of Comments Related to Scope and Exceptions to the Mandate

A. Scope

1. Comments to the 2011 NPRM

The April 2010 rule mandated the use of EOBRs for motor carriers that demonstrated a history of severe noncompliance with the HOS regulations. Although many commenters, including the NTSB, had concerns that this limited mandate would not adequately address safety issues, the Agency could not include in the 2010 rule requirements that extended beyond the scope of the January 18, 2007 NPRM (72 FR 2340). At that time, the Agency estimated that the remedial directive aspect of 2010 rule would have been applicable to about 2,800 motor carriers in the first year and 5,700 motor carriers each year thereafter.

In the February 2011 NPRM, FMCSA proposed mandatory installation and use of EOBRs in all CMVs for which the use of RODS was required (76 FR 5537). The provisions of 49 CFR 395.1(e)(1) and (2) would still allow short-haul drivers to continue using the timecard provision to record HOS. Although FMCSA would not have required short haul drivers to install and use EOBRs, nothing in the NPRM precluded them from doing so. Several commenters to the NPRM suggested that the Agency consider expanding the rule to include a broader scope, or a ''true universal'' mandate for ELD use. Many other commenters supported the Agency's proposal for all current RODS users to be required to use ELDs.

2. Comments to the 2014 SNPRM

In the SNPRM, FMCSA proposed to mandate the installation and use of ELDs for the majority of interstate motor carrier operations. Drivers engaged in operations that do not require the preparation of RODS would be able to use ELDs to document their compliance with the HOS rules, but FMCSA would not require them to do so. Drivers currently allowed to use timecards could continue to do so under the provisions of 49 CFR 395.1(e). Drivers who need to use RODS infrequently or intermittently would also be allowed to continue using paper RODS, provided they do not need to use RODS more than 8 days in any 30-day period.

The 2014 SNPRM evaluated four options for this proposed ELD mandate:

- *Option 1:* ELDs are mandated for all CMV operations subject to 49 CFR part 395.
- *Option 2:* ELDs are mandated for all CMV operations where the driver is required to complete RODS under 49 CFR 395.8.
- *Option 3:* ELDs are mandated for all CMV operations subject to 49 CFR part 395, and the ELD is required to include or be able to be connected to a printer and print RODS.
- *Option 4:* ELDs are mandated for all CMV operations where the driver is required to complete RODS under 49 CFR 395.8, and the ELD is required to include or be able to be connected to a printer and print RODS.

Option 2 is FMCSA's preferred option for the mandated use of ELDs. FMCSA adopts this option in today's rule.

General comments. An individual noted that the ELD mandate would put a cost burden on the occasional interstate driver (*e.g.,* 10–20 times per year). An individual stated an objection to the ELD mandate on the basis that the government does not have the right to require private individuals to install something in their private property.

Because service technicians are not subject to Federal and State HOS restrictions, and they operate several vehicles owned or leased by different carriers on a daily basis, the American Truck Dealers (ATD) division of the National Automobile Dealers Association stated that it does not make sense to subject them to the RODS requirements or to the proposed ELD and supporting documents rules.

Comments on Option 1: ELDs mandated for all CMV operations subject to 49 CFR part 395. An owner-operator, a driver, and two individuals stated that the rule should cover all commercial truck drivers, with no exceptions. An individual commenter specifically included the 100/150 air mile carriers—which the commenter asserted were most problematic. Klapec opposed Option 1 and stated that, as a company with an excellent safety record, it is being subjected to punishment for the actions of a small percentage of the industry that routinely violate the HOS rules. The company believes ELDs should be mandated only for the chronic violators of the HOS rules.

Comments on Option 2: ELDs mandated for all CMV operations where the driver is required to complete RODS under 49 CFR 395.8. The majority of commenters supported Option 2. The International Brotherhood of Teamsters (IBT) stated that safety benefits are higher when all regulated CMV operations are included in the ELD mandate, but supported Option 2. The International Foodservice Distributors Association (IFDA) noted its support for the Agency's proposed exclusion from the ELD mandate of drivers who are not currently, or are only occasionally, subject to RODS requirements.

The National Limousine Association (NLA) stated that Option 2 is the most sensible option and that it squarely meets the Congressional mandate under MAP–21. If the short-haul exemption were eliminated, NLA noted there would be severe negative economic impacts on NLA's members, most of whom are small businesses. NLA also stated short-haul carriers have a strong record of safety and HOS compliance, and that the focus must be on long-haul operators, where the fatigue-related safety concerns exist.

Comments on Options 3 and 4: ELDs must include, or be connected to, a printer. Options 3 and 4 are essentially the same as Options 1 and 2, but would also require those ELDs to include, or to be able to be connected to a printer.

Support Printer Requirement. Only one commenter supported the printer requirement. An ELD provider noted that Options 1 and 2 lack a practical interface for carrying out manual inspections at roadside inspections stations and that electronic data transfers are often not possible. The ELD provider recommended that FMCSA require ELDs to have a printer or the ability to connect to a printer.

Oppose Printer Requirement. Several commenters, including the Agricultural Retailers Association, the NLA, and

several individuals, opposed the printer requirement due to the expense of maintaining and operating printers.

3. FMCSA Response

FMCSA agrees with the comments to the NPRM supporting the exception for short haul operations under § 395.1(e) because this approach presents the most cost effective approach for mandating ELD usage among a large percentage of CMVs operating on the Nation's highways. Based on comments to both the 2011 NPRM and the 2014 SNPRM, as well as the economic factors presented in the RIA for this rulemaking, FMCSA requires ELDs for CMV operations where the driver is required to complete RODS under 49 CFR 395.8, subject to limited exceptions addressed below.

The Agency continues to believe that this is the best and most cost-effective option and that it meets the requirements of MAP–21. FMCSA's analysis did not find a compelling safety or cost-benefit argument to include those drivers engaged in ''short haul'' operations given that these drivers work within a limited distance of the work-reporting location and generally are released from duty within 12 hours from the beginning of the work day. Because these drivers currently rely upon time records rather than RODS and operate limited distances within strict daily limits, FMCSA believes there is less cause for concern about fatigue than is the case with the population of drivers that must prepare RODS.

In response to commenters that believe the ELD mandate should be imposed only on drivers required to hold a CDL, the Agency notes that Congress linked the ELD requirement to the HOS requirements such that any person who operates a CMV, as defined in 49 CFR 390.5, and is subject to the Federal HOS requirements for RODS is subject to the mandate. Therefore, today's rule is applicable to CMV drivers required to keep RODS, regardless of whether they require a CDL.

In response to commenters' concerns regarding printer-related expenses, the rule includes a display option as an alternative to a printer as a backup to electronic data transfer.

B. Exceptions to the Requirement To Use ELDs—the 8 in 30-Day Threshold

1. Comments to the 2011 NPRM

In the 2011 NPRM, the Agency acknowledged that drivers working for motor carriers that keep timecards under 49 CFR 395.1(e)(1) and (2) may occasionally operate beyond the parameters of those provisions (for example, by operating outside the specified 100- or 150-air-mile radii). Under the 2011 NPRM, if a driver operated a CMV more than 2 of every 7 days using RODS (outside the parameters of the timecard exemption), the driver would be required to use an EOBR. This effectively set a threshold for EOBR usage. The NPRM specifically asked for comments and suggestions on this topic, as the Agency wanted to know if a more appropriate alternative threshold exists.

None of the commenters responding to the SNPRM favored the proposal as written. However, several commenters offered alternatives for FMCSA's consideration. ATA agreed with the proposed weekly period but recommended setting the threshold at three or more trips. The United Parcel Service (UPS) recommended that FMCSA consider a longer period—at least a month and at least 5 instances of exceeding time or distance limits within that month—to give carriers the opportunity to determine if deviations from the short-haul provisions were due to unplanned but unavoidable situations or from recurring situations. If EOBR use ultimately would be required for specific operations, UPS also suggested that FMCSA mandate EOBRs only for a specified period of time and consider restoring the timecard exemption if no further time or distance limit deviations occur.

FedEx Corp (FedEx) raised concerns about the potential complexity of an ''occasional use'' provision. FedEx noted that there are two different operational situations where a driver, who usually uses a timecard, would be required to use RODS because the driver had exceeded the time or distance thresholds: When the driver is aware of this prior to commencing a trip or when the driver discovers this during the trip. For this reason and to facilitate compliance assurance in roadside settings, FedEx recommended that FMCSA adopt a ''bright-line'' rule that would require EOBR use if the driver knew at the start of the trip that a RODS would be required.

The Utility Line Clearance Coalition recommended that FMCSA base the threshold for EOBR use on the number of trips in a month a driver operates outside the timecard provisions. The National School Transportation Association believed that a threshold premised on trips made during a given week does not properly account for the seasonal nature of some school transportation activities. The Association suggested that FMCSA consider a threshold based on total annual trips and that carriers that do not exceed the time or distance limits on more than 10 percent of their trips be exempt from EOBR use.

FirstGroup requested that FMCSA retain the current exemption for intrastate school bus operations and consider allowing the drivers to use RODS on the few occasions (less than 1 percent of all field trips) when they would operate beyond a 100-air-mile radius.

Schneider National, Inc. (Schneider) questioned the ability of short-haul carriers to make day-to-day judgments concerning EOBR use. Schneider also asked FMCSA to clarify the assessment periods (for example, do ''week'' and ''month'' refer to calendar weeks and months, or rolling periods?) and the Agency's expectations concerning when HOS would need to be recorded using an EOBR.

NLA believed that FMCSA did not have sufficient data to justify applying an EOBR mandate to short-haul motor carriers, particularly those carriers that operate smaller capacity passenger vehicles.

Individual commenters expressed different concerns about the short-haul provisions and EOBR use. One commenter believed long-haul motor carriers might change to relay operations to take advantage of the short-haul provisions. Another focused on seasonal operations where a driver is required to use RODS only for 10–15 days per year. This commenter recommended FMCSA consider setting a yearly threshold for RODS use based on annual distance traveled or number of days a CMV driver operates outside the short-haul limits.

2. Comments to the 2014 SNPRM

In response to the comments to the NPRM, FMCSA proposed a new threshold for ELD use in § 395.8(a)(1)(iii) of the SNPRM. FMCSA proposed that a motor carrier could allow a driver who needed to complete RODS not more than 8 days within any rolling 30-day period to record the driver's duty status manually, on a graph grid. FMCSA would not require these drivers to use an ELD. This proposed exception was intended to provide relief for drivers who only intermittently needed to use RODS, for example, drivers in short-haul operations who usually use time cards or occasional CMV drivers.

Many commenters supported the proposed exception for drivers who infrequently need to use RODS, including the California Highway Patrol, the National Private Truck Council, the National School Transportation

Association, the Snack Food Association, and the IBT. Other commenters proposed alternate bases for the exception.

Some commenters believed that the proposed exception was too restrictive to accommodate all those drivers who might need it. A commenter suggested a threshold of 15 days in a 30-day period before an ELD is required, while another commenter said that the 8-day limit did not consider circumstances like weather. The National Ready Mixed Concrete Association opposed the proposed exception, saying that the ''provision, as written, is unachievable in the ready mixed concrete industry.'' It called the 8 days in 30-days exception ''shear overreach and outside the scope of what statutorily should be in the proposal,'' because it is not required by MAP–21. The Association wrote that FMCSA has a duty and is compelled not to include such a provision, which they characterized as ''non-mandated, unnecessary, and unfounded.''

The National Motor Freight Traffic Association (NMFTA) also objected to the 8 days in 30-days exception, writing that the proposed rule effectively requires motor carriers to equip trucks with ELDs if there is any possibility their drivers may surpass the 8-day threshold. NMFTA asked how a driver who may or may not exceed the 8-day threshold and who may have used different pieces of equipment will be expected to provide a recap of the last 7 days of HOS compliance data to roadside inspectors. NMFTA also questioned what the motor carrier's exact responsibilities will be to assemble, monitor, and retain ELD records and other driver records across several pieces of equipment?

The American Pyrotechnics Association believed that the 8 in 30-day exception was too restrictive and would not apply to its drivers because they do not return to the work-reporting location within 12 hours. The California Construction Trucking Association said the exception should also apply to intrastate operations using paper RODS to comply with a State regulation.

Some commenters, including the Continental Corporation (Continental), believed the 8 in 30-day exception would be difficult or impossible to enforce at roadside. CVSA wrote that roadside enforcement would not be able to determine whether the driver had exceeded the short-haul exception and by how much.

3. FMCSA Response

In the 2011 NPRM, FMCSA proposed that drivers using RODS more than 2 out of 7 days would have to use an ELD, and drivers using RODS for 2 days or fewer out of 7 could continue to use paper. Overwhelmingly, commenters rejected this threshold. Therefore, for a number of practical and enforcement reasons, FMCSA proposed in the SNPRM—and retains in today's rule—an 8 in 30-day threshold for ELD use. The fact that Congress vested in the Agency responsibility for mandating ELD-use by regulation, rather than requiring use of ELDs by statute, negates the suggestion that the Agency lacks any discretion to prescribe the parameters of the regulation. Nevertheless, the Agency has exercised that discretion narrowly, providing only three exceptions. Drivers who need to use RODS infrequently or intermittently, even if they are not operating under the short-haul exception in § 395.1(e), may continue to use paper RODS provided they are not required to use RODS more than 8 days in any 30 day period.

The Agency considered a number of factors in selecting the 8/30 day threshold. While the 8/30 day threshold preserves nearly the same ratio as the proposed 2/7 threshold, it will provide drivers and motor carriers with more flexibility. In addition, the 8-day period is the standard time frame for current HOS recordkeeping requirements. Currently drivers are required to keep the previous 7 days' records and the present day's records. Allowing a driver 8 days out of 30 days as the threshold to use paper RODS before requiring ELD use keeps this time frame consistent. The 8/30 day threshold will also accommodate some seasonal concerns. The Agency believes that expanding the 8/30 day threshold to 15/30 days, as suggested by some commenters, is inappropriate. That level of exception would significantly decrease the effectiveness of the ELD mandate. Similarly, extending the 30-day period would limit the ability of the Agency to monitor compliance during reviews.

The Agency acknowledges that any exception to the ELD mandate creates challenges for roadside enforcement. the Agency does not believe that the short haul exception from ELD use will present different challenges from the current challenges authorized safety officials face in monitoring the short-haul exceptions in 49 CFR 395.1 (e)(1) and (2).

C. Requests for Exemption for Driveaway-Towaway Operations, Dealers, and Pre-Model Year 2000 Vehicles

1. Comments to the 2011 NPRM

In the February 2011 NPRM, FMCSA proposed mandatory installation and use of EOBRs in all CMVs for which the use of RODS is currently required (76 FR 5537). While the NPRM would have allowed short-haul drivers to continue to use timecards, it did not provide for any other exceptions other than the 2 in 7-day exception. Commenters asked FMCSA to consider an exception to allow driveaway-towaway operators and CMV dealerships to use paper RODs in the vehicles they deliver to their customers.

In a driveaway-towaway operation, a driver transports an empty or unladen motor vehicle, with one or more sets of wheels on the ground, either by driving it or by using a saddle-mount or tow-bar. The driver moves the vehicle between a manufacturer and a dealer or purchaser, or between someone selling or leasing the vehicle and the purchaser or lessee. The driver may take the vehicle to a terminal or repair facility. Typically, the driver drops the vehicle off and either returns home or picks up another job. A motor carrier that specializes in these driveaway-towaway operations often employs the driver(s). Dealerships have some of the same issues as driveaway-towaway operations when delivering vehicles to their customers. The vehicle driven may or may not be part of the delivery.

While the NPRM did not specifically address older vehicles, FMCSA also received comments on using an EOBR with an older engine.

Driveaway-towaway operations. Several commenters stated that they deliver CMVs of many different makes and models, and that EOBR installation would be a particular burden for them. Other commenters pointed out that the FMCSRs already contain exceptions and special provisions for driveaway-towaway operations (*e.g.,* §§ 390.21(f); 393.42(b)(2); 393.43(f); 393.48(c)(2); 393.95(a)(6); and 396.15). Because EOBRs are generally an aftermarket device, several commenters, including the Engine Manufacturers Association/ Truck Manufacturers Association, stated that the temporary installation and subsequent removal of an EOBR would represent a significant expense for a one-time use. The Engine Manufacturing Association, Rush Enterprises, Inc. (Rush) and ATC Transportation, LLC (ATC) were also concerned that the process of installing and removing a temporary EOBR might damage the new vehicle or the EOBR and cause delivery delays. A few commenters noted that small portable or hand-held units were either not available or the commenters did not have information about them. Others noted that training costs and technical requirements would make using

manufacturer-installed EOBRs impractical, were they to be available. Rush, Driveaway-Towaway Carriers (a group of four individual carriers), and ATC each provided detailed projections of the cost impact on their operations.

Dealerships. One commenter addressed the use of EOBRs on CMVs being transported from dealerships. This commenter suggested that a portable unit could be plugged into the 9-pin connector under the dash and could be used in these operations.

Vehicles manufactured before model-year 2000. Two commenters stated that many older CMVs in use have mechanically-controlled engines and may not accommodate EOBRs (*i.e.,* there is no ECM). In contrast, another commenter advised that two state-of-the-practice EOBR-class models can be attached to a truck that is not equipped with an ECM by use of a sensor attached to the transmission, drive shaft, or axle, depending on the truck. Verigo Inc. (Verigo) recommended that FMCSA permit a driver to use untethered means (*i.e.,* an ELD that achieves integral synchronization through wireless communication with the CMV) to record on-duty time and off-duty time and carry out other recordkeeping tasks while away from the vehicle.

2. Comments to the 2014 SNPRM

Comments to the 2011 NPRM raised the issue of exemptions addressing specific sectors of the industry or specific types of CMVs. Given the 8 in 30 days threshold for drivers infrequently required to keep RODS, FMCSA stated in the SNPRM that it was not proposing any additional exceptions [79 FR 17672, March 28, 2014]. However, drivers and carriers in driveaway-towaway operations and those who use CMVs manufactured before model year 2000 explained how the proposed technical standards would be difficult to apply, given their unique operations.

FMCSA sought comments on issues related to installing and using an ELD on CMVs manufactured prior to 2000 [79 FR at 17668, Mar. 28, 2014]. These comments are also discussed under Section X, W, Pre-2000 Model Year CMVs, of this preamble.

Driveaway-towaway operations. A number of comments to the SNPRM questioned how ELDs would affect driveaway-towaway operations. Several commenters, including ATC, Driveaway-Towaway Carriers (a group representing Classic Transport, Inc., Horizon Transport, Inc., and Quality Drive-Away, Inc.), the, Recreational Vehicle Industry Association, and Driveaway-Towaway Coalition (representing Bennett DriveAway, D&T Transport, EagleOne Oilfield Transportation, Hoosier Transit, Mamo Transportation, Norton Transport, and PARS), asked that the ELD rulemaking provide an exception for driveaway-towaway operations because of the unique nature of the operations. The commenters described the unique circumstances of a driveaway-towaway operation that make the installation and use of ELDs impractical and excessively burdensome:

- A driveaway-towaway operator is not allowed to alter, attach, or disassemble any portion of the CMV being transported. It must be delivered in the same condition as when it was presented for delivery.
- The driveaway-towaway operator does not own the CMV or rent or lease the CMV, but it is financially liable for any re-assembly or repairs to a CMV damaged or changed in transit.
- The driveaway-towaway operator operates the CMV only once, delivering it to the dealer/purchaser.
- The driveaway-towaway operator transports every type of CMV and other drive/towaway cargo for many different manufacturers of recreational, commercial, or specialized motor vehicles. The driver transports both new and used CMVs of every variety; the vehicle being transported may not have an ECM.

Henkels & McCoy Inc. and Driveaway-Towaway Carriers noted the lack of information on existing portable ELDs. The Driveaway-Towaway Coalition reported that many vehicles are not portable-ELD compatible.

ATC noted that a driver will have to carry the equipment to connect to each type of CMV the driver might encounter. ATC maintained that the costs for training, extra equipment, and constant installation are over and above what the majority of the trucking industry would incur to comply with mandated ELDs, and were not part of the cost analysis of the SNPRM.

The Driveaway-Towaway Carriers and the Driveaway-Towaway Coalition provided detailed descriptions of their collective operations. Both sets of commenters noted that FMCSA has recognized the unique nature of driveaway-towaway operations, referencing the exceptions and provisions in the CFR. The Recreational Vehicle Industry Association offered statistics for the driveaway-towaway companies demonstrating a low crash frequency.

Dealerships. ATD wrote that some dealerships use contract drivers to operate new and used CMV inventory in intra- or interstate commerce; others use employee CDL holders. New or used sales department staff may pick-up or drop-off CMVs at factories, ports, customers, auctions, other dealerships, etc.

ATD recognized that some parts drivers may be covered by the exceptions in 49 CFR 395.1(c) and (e). To the extent that they fail to fall within an existing exception, ATD urged FMCSA to provide that such CDL holders need not use ELDs to meet RODS requirements if the vehicles being operated are not titled to or leased by a dealership employer. ATD also maintained it would be very burdensome for small business truck dealerships to have to set ELD systems and install ELD units in vehicles to which they do not take title.

Vehicles manufactured before model year 2000. Eight commenters responded to FMCSA's request for comments on the complexity of compliance with a CMV manufactured on or before 2000. The California Construction Trucking Association said that while it is possible to retrofit an older truck, its research indicates that it is costly, at about $1,000 per truck in California. In contrast, Continental stated that it would cost between $100 and $300 per vehicle. XRS Corporation (XRS) stated that the Global Positioning System (GPS) solutions and related cost for black boxes could result in an incremental cost of $250 per vehicle. PeopleNet stated that obtaining speed from a source other than the ECM or GPS will be very complex and cost-prohibitive. Both PeopleNet and Zonar Systems (Zonar) supported using GPS-based ELDs for older CMVs.

The Truck and Engine Manufacturers Association generally supported the proposed rule. It raised questions about whether FMCSA was referring to model years or calendar years, as these are not the same. The association noted the additional requirement that the engine actually have an ECM is crucial in the event that a mechanically controlled engine was installed in a vehicle with a model year 2000 or later.

One carrier was concerned about light duty vehicles with On-Board Diagnostics (OBD–II) ports. It stated that OBD–II ports cannot share data if they are already dedicated for another purpose. This situation exists in several styles of its vehicles equipped with OBD–II ports; the ports are already occupied by auxiliary equipment. Another problem exists with capturing data from OBD–II ports: There are five different protocols used in OBD–II and the software is proprietary to the vehicle manufacturer. This would require the vehicle manufacturer to release their

software to use the OBD–II to capture the necessary data effectively. A towaway driver asked how the driver is to record time if there is no engine control unit (ECU) plug available.

3. FMCSA Response

Both driveaway-towaway operations and the operations associated with truck dealers represent a unique operational challenge concerning the use of ELDs. FMCSA believes that while many of these operations will fall within the current ''timecard'' provisions for HOS recordkeeping, some will not.

In today's rule, FMCSA includes an exception from the ELD mandate for driveaway-towaway operations, as defined in 49 CFR 393.5, provided that the vehicle driven is part of the shipment delivered. FMCSA acknowledges the concerns raised by these operators. FMCSA understands that ELDs may not fit their operational model when providing a one-time delivery of a vehicle. Neither the driveaway-towaway company nor the driver own or lease the vehicles that they will be driving under this exemption.

This exception only applies to driveaway-towaway operations where the CMV being driven is the commodity. These drivers will be required to keep proper RODS and retain the same number and categories of supporting documents as those required to use ELDs plus toll receipts. FMCSA believes that these operators will be easy to recognize at roadside; by the nature of their operation, drivers will be carrying supporting documents that explain their operation. To the extent that operations at a dealership fit the definition of a driveaway-towaway operation, those operations are able to benefit from this exemption.

FMCSA also includes an exception for to those drivers operating CMVs older than model year 2000, as identified by the vehicle identification number (VIN) of the CMV. Comments have indicated and FMCSA's research has confirmed that pre-2000 model year trucks may not allow the ELD to connect easily to the engine. While the Agency has confirmed that there are ways of equipping older vehicles to use an ELD consistent with today's rule technical specifications, these are not always cost beneficial or practical. Further, the Agency lacks confidence that the technology will be available to address this entire segment of the market (pre-2000 model years) at a reasonable cost.

While OBD–II does support 5 signaling protocols, none of these are proprietary. Each protocol is outlined in the standard and the engine manufacture decides which to implement and most vehicles implement only one of the protocols. It is often possible to deduce the protocol used based on which pins are present on the J1962 connector. While OBD–II diagnostic, connectivity needs, and reporting capability vary by manufacturer, FMCSA believes that ELD providers will work with each vehicle manufacturer for specific details.

D. Requests for Exceptions From the ELD Mandate for Certain Segments of the CMV Industry

1. Comments to the 2011 NPRM

While the NPRM preserved the exception for short-haul drivers who occasionally require RODS to continue to use timecards under § 395.1(e), it did not provide for other exceptions. This exception was limited to drivers requiring RODS no more than 2 days in any 7-day period; on those days, they could maintain paper RODS. FMCSA asked for comment on whether it should grant other exceptions. Responses were received from businesses, trade associations and others representing school bus operations, truck rental operations, agricultural operations, construction, maintenance, oil and gas operations, utilities, concrete companies and hazardous materials transporters. Many commenters believed FMCSA should provide an exception for their segment of the industry or their operations from the mandate to use ELDs. Commenters mainly focused on the nature of their operations or the costs of EOBRs. A hazardous materials transporter raised security concerns over tracking of vehicles. An organization representing concrete companies recommended a limited expansion of the short-haul exception for drivers occasionally exceeding 100 miles.

2. Comments to the 2014 SNPRM

In the SNPRM, FMCSA proposed only a limited exception to the ELD mandate—for drivers who are rarely required to keep RODS. Drivers who need to use RODS infrequently or intermittently would be allowed to continue using paper RODS, if they are not required to use RODS more than 8 days in any 30-day period. The 2 days out of 7-day period proposal in the NPRM was eliminated in light of the 8 days in 30 exception.

Many commenters to the SNPRM believed that ELDs are not necessary or appropriate for drivers in their particular industries, and asked that their industry be excepted from the requirement to install and use ELDs. Some commenters asked for an exception for private motor carriers. A commenter believed an exception would be appropriate because private motor carriers are not usually generating revenue through hauling, crossing State lines, or driving on the roads as much as for-hire carriers. A commenter asked how lawn services, private delivery, horse show teams, etc. would be handled. A commenter wrote that his or her drivers were working in the field, where they may not have any technological connectivity. For flatbeds; specialized heavy-haulers; auto transporters, or any other segment of the industry where drivers have to do their own loading, unloading, or load securement, a commenter wrote that ELDs would cripple the industry. Commenters also asked for an exception for testing a CMV when it is being serviced or repaired.

Comments from the following special industries or types of operations are discussed below: Agricultural-related operations; utilities; construction, oil and gas, and ready-mix concrete industry; pyrotechnics operations; driver salesperson operations; motion picture industry; and waste and recycling industry.

Agriculture-related operations. The Agricultural Retailers Association interpreted the proposed ELD mandate would not apply to agricultural operations. It based its interpretation on the rule FMCSA published March 14, 2013 (78 FR 16189), which provided agricultural exceptions to the HOS rules in part 395. In contrast, several individual commenters believed that the proposed rule would apply to agricultural operations. These commenters maintained that the ELD mandate would be cost prohibitive for farm and ranch operators.

One commenter noted that agricultural commodities are seasonal in nature and asked how the ELD mandate would affect exemptions to the HOS rules for the transportation of anhydrous and liquid fertilizer.

An individual working for a company in the agricultural seed industry also mentioned the seasonal nature of the company's operations. The company has CMV's operating in interstate commerce on the road every day of the year, but most of its drivers qualify and use the 100- or 150- air-mile short haul exemptions. The commenter wrote that during certain seasons (*i.e.* planting, detasseling/pollinating, harvest), some of the drivers may increase their driving and may need to fill out RODS more than 8 times in a 30 day period during a 3–6 week season. The commenter noted that these drivers are not

professional, over-the-road truck drivers, but production and research associates who mainly operate pickup trucks with trailers that put them over the weight limits, qualifying them as CMVs. The commenter stated that putting ELDs in all of these pickups—which are only occasionally used as CMVs—would be a significant burden to the company.

Utilities. Henkels & McCoy Inc. believed the proposed regulation was designed for long-haul truck drivers, not their drivers who are power line, pipeline, and telecommunications workers who only operate a CMV short distances to and from or on a job site. The commenter noted that utility project job sites often span great distances where the majority of the driving is accomplished on the construction right of way, not on public roadways. Henkels & McCoy, Inc., noted that some of these projects might not fall under the short haul exemptions in § 395.1(e) or the current interpretations of Utility Service Exemption from the HOS rules, thereby requiring the installation of ELDs in thousands of pieces of equipment that in the course of a day may only be operated a few miles and may not traverse a public roadway for days or weeks.

Construction, oil and gas, and other specialized operators. A commenter from the service and drilling equipment industry wrote that ELDs are unnecessary because the drivers seldom drive far, but do not qualify for the short-haul exception due to their longer hours. Because of the conditions under which those trucks operate, the commenter wrote that maintenance would be impossible. Another commenter questioned if FMCSA had taken into consideration the ability of ELDs to accommodate the HOS rules applicable to oil fields.

A commenter who operates a small crane company asked FMCSA to consider an exception for special mobile machinery that sometimes needs to be moved more than 100 miles. The commenter maintained that, although the company's drivers will not usually exceed the 8 days in 30 day exception while driving a crane, they will at times exceed that amount when moving one of the large cranes. The commenter noted that older cranes do not have modern electronic engines and computers to support a compliant e-log device, and asked whether FMCSA expects them to modernize the engines to be e-log compliant. The commenter asserted that this process would not only be an excessive financial burden to a small company, but would also achieve no safety gain worth the cost because a slow moving crane on the highway for less than 5,000 miles per year is statistically not a risk to the traveling public. The Associated General Contractors of America (AGC) urged FMCSA to exempt the construction industry from the ELD mandate. AGC noted that Congress directed FMCSA to provide special consideration to construction drivers in the HOS regulations by allowing construction drivers to reset the on-duty clock after an off-duty period of 24 or more consecutive hours, showing Congress' recognition of the unique circumstances faced by the industry's drivers. The commenter also noted that no studies have concluded that there is a safety deficiency specific to construction workers driving under these rules.

AGC believed that the mandate would create unreasonable impacts on the construction industry given the cost of implementation and administration issues. The commenter noted that the constant vibrations, jarring movements, and bumps are likely to have an impact on ELD operations, longevity, and accuracy. AGC reported that several of its members claim that there is at least a 10 percent failure rate for ELDs. The commenter wrote that the purchase and installation of ELDs will be far more expensive than retaining records with paper RODS and believed that FMCSA estimates fall far short of the actual costs. AGC believed that administrative issues related to identifying drivers, particularly temporary drivers, and correctly recording driving time would cause problems for the construction industry. AGC asked FMCSA to consider this record and extend its part 395 exemption to the new ELD proposal.

Pyrotechnics. The American Pyrotechnics Association (APA) supported limiting the scope of the ELD mandate to drivers who are currently subject to keeping RODS. The APA, however, believed that FMCSA should provide an exemption for industries that are engaged primarily in providing services or transporting tools of the trades, as opposed to long-haul trucking. The commenter wrote that the majority of its members operated CMVs over short distances to and from job sites and provided a detailed explanation of their operations. Based upon data provided by APA members and the carriers currently underwriting vehicles to the industry, during the peak Fourth of July season, the industry rents more than 3,500 vehicles for the 7–14 day period. The two primary rental truck suppliers to the fireworks industry have indicated that neither is planning to install ELDs at this time because they do a minimal amount of commercial leasing, focusing instead on the consumer market.

The APA did not believe that ELDs would improve safety or prevent crashes for drivers within the fireworks industry. The commenter wrote that ELDs could actually contribute to more crashes as a distraction for drivers who are not used to them. The APA wrote that it could not comply with the mandate until ''plug and play'' devices, which can be rented on a short term basis, become readily available. APA requested relief be provided to small operators, especially those that must rely on rented vehicles and intermittent/casual drivers over a short period of time to handle all of their business commitments.

Driver/salespersons. YRC Worldwide Inc. (YRC) said that driver salespersons who exceed the short-haul exception in § 395.1(e) should be exempted based on their records availability, starting and ending their shifts at the same location, and serving in the role of driver salesperson. They should not be denied the exemption because of an arbitrary mileage calculation. Based on the flexibility it needs in its city fleet, YRC wrote that it may have to equip all vehicles with ELDs and train all the driver salespersons to ensure they could serve customers outside a 100 air-mile radius.

Motion picture industry. The Motion Picture Association of America (MPAA) recommended that FMCSA permit the non-electronic interchange and production of RODS, at least for production drivers and other similarly situated drivers, *i.e.,* those who operate multiple CMVs or are employed by multiple motor carriers. This approach could be made permanent, or FMCSA could apply it to production drivers for an appropriate period beyond the proposed, industry-wide compliance deadline.

MPAA believed that an exception for drivers who operate multiple CMVs or are employed by multiple motor carriers would allow ELD technology to mature, with drivers generating less complex RODS, before requiring production drivers to produce ELD-generated, all-electronic RODS. The MPAA believed that ELD providers are likely to focus on releasing ELDs suitable for the most common CMV operations and sophisticated ELDs will not be available when the rule is implemented.

Ready-mixed concrete. Both Glacier Northwest and Cemex Construction Materials Pacific believed the rule would force companies to install ELDs, penalizing the ready-mixed concrete industry because of the nature of its product and unpredictable operations.

The National Ready Mixed Concrete Association said that this proposal, in effect, is the true universal approach requested by NTSB. Instead, all three commenters suggested that the rule exempt drivers operating under § 395.1(e)(1), but eliminate the 12-hour on-duty threshold. Both Cemex and Glacier wrote that ready-mixed concrete industry drivers are not subjected to fatigue-inducing situations and generally operate under § 395.1(e)(1), but may need to work longer days.

The National Ready Mixed Concrete Association commented that the reason for the proposed ELD mandate for CMVs ''is to obtain better Hours of Service (HOS) compliance.'' The commenter described the working conditions of mixer drivers, and commented that, because of these conditions and exemptions to HOS compliance, making use of ELDs by mixer drivers ''is a technical inapplicability.''

Since mixer drivers are only in the CMV or driving a small amount of the time they are on-duty, the commenter believed that ELDs cannot accurately determine HOS compliance or productivity for mixer drivers.

Waste and recycling industry. The National Waste and Recycling Association commented that the industry operates a unique fleet that differs significantly from long-haul trucks and other short-haul trucks. The association provided a detailed description of its operations. The commenter was concerned that the ELD may not be able to handle unusual stresses inherent in their operations and may require constant maintenance.

The commenter wrote that FMCSA has acknowledged and research has shown that fatigue is less of a problem for short-haul drivers, for a number of reasons. Further, the association commented that Congress recognized the unique nature of local routes by limiting the required use of ELDs to CMVs operated by a driver subject to the HOS and RODS requirements. It wrote that the Congressional intent is clear: Local route, short-haul drivers who show HOS compliance by the use of time cards do not need to use ELDs. The association commented that the Agency, however, is now proposing that if a driver needs to use paper logs for more than 8 days in any 30-day period, that driver must use an ELD. The commenter was puzzled by the proposed 8 in 30-day threshold because it directly contradicts the language in footnote 15 on page 79 FR 17680, which states, ''Today's SNPRM would not require short-haul drivers who would need to keep RODS more than 8 days in any 30-day period to use an ELD. Although FMCSA cannot quantify the costs to carriers, the Agency believes extending the ELD mandate to these drivers would not be cost beneficial.'' [15] While the commenter wrote that it understands the Agency's desire to prevent abuse of short-haul, local-route status, it believed that the proposed remedy is excessive, unnecessary, and will produce contradictory results. It agreed with the footnote that it is not cost beneficial.

The association commented that time cards adequately document HOS compliance. The commenter wrote that whereas the time card is an absolutely accurate record of duty time, an ELD will be a poor tracker of driving time in the short-haul, local route waste and recycling industry.

3. FMCSA Response

Subject to limited exceptions, today's rule establishes clear requirements for the use of ELDs in CMVs operating under circumstances where drivers currently must keep paper RODS. Generally, the requirements apply to drivers who are subject to the HOS limits under 49 CFR part 395, and do not satisfy the short-haul exception to the RODS requirement. FMCSA considered all the comments and that, subject to a narrow exception, declines to provide industry-specific exceptions, given the lack of safety performance data for specific industry segments and the fact that industry segments often overlap.

The Agency, however, has provided limited exceptions from the ELD mandate. The 8-day out of 30 threshold is intended to accommodate drivers who infrequently require RODS. The driveaway-towaway exception addresses unique aspects of those operations, but only if the vehicle driven is or is part of the shipment. The pre-2000 model year exception reflects concerns about employing an ELD on such vehicles.

FMCSA anticipates that most of the industry segments seeking relief from the ELD mandate are addressed, in part, under the short-haul exemption under 49 CFR part 395. ELD use will be required only if a driver operates outside the short-haul exception to the paper RODS provision for more than 8 days of any 30-day period.

As to the concern about location tracking technology creating a security risk for hazardous materials, FMCSA notes that today's rule does not include a requirement for real time tracking of CMVs.

FMCSA believes that ELD providers will address the needs of specialized industries. We note that Congress did not address concerns of specific industry sectors in mandating a requirement for ELDs.

E. Exceptions for Small Business

1. Comments to the 2011 NPRM

Because small businesses comprise such a large portion of the motor carrier population subject to the FMCSRs, FMCSA stated in the 2011 NPRM that it is neither feasible nor consistent with the Agency's safety mandate to allow a motor carrier to be excepted from the requirement to use EOBRs based only on its status as a small business entity.

Several motor carriers, however, contended that very small operations should be excepted. One commenter suggested that ELDs should be required only for fleets of 25 or more trucks, another would set the threshold at 100 or more trucks. An owner-operator wanted the rule to allow owner-operators who own and drive one truck to use a Smartphone system that uses GPS satellite signals for location tracking and is not integrated with the truck's on-board computer.

Associations representing small motor carriers also wanted special consideration. The Air and Expedited Motor Carrier Association, National Association of Small Trucking Companies, and The Expedite Association of North America asked for a simple waiver procedure for small businessmen, reasoning that the EOBR requirement would impose needless costs on hundreds of thousands of small businesses. The National Federation of Independent Business (NFIB) believed that expanding the EOBR rule to cover all CMV drivers subject to the HOS requirements ''is unnecessarily punitive to small businesses that operate locally.''

Given the disproportionate percentage of small businesses in the industry, the NLA felt that any final rule that mandates EOBRs for all CMV passenger carriers without a specific cost-benefit analysis of the effect of the rule on smaller passenger-carrying CMVs ''would be arbitrary, capricious and excessive.'' The association argued that exempting small businesses whose safety records demonstrate satisfactory compliance with the HOS rules from an EOBR mandate would not equate to toleration of noncompliance. Those drivers would still be required to keep RODS and operate within the HOS limitations. The association asserted

[15] FMCSA acknowledges an error in the referenced footnote. It was intended to read, ''[t]oday's SNPRM would not require short-haul drivers who would need to keep RODS *not* more than 8 days in a 30-day period to use an ELD. . . .''

that members of the industry that operate smaller CMVs for shorter distances and shorter periods of time are not motivated to falsify RODS.

The Advocates for Highway and Auto Safety (Advocates), however, supported the reasoning behind the Agency's decision not to except small businesses from the EOBR requirement. Advocates stated that exempting some or all small businesses would undermine the purpose and safety benefits sought by proposing the rule and render it ineffectual.

2. Comments to the 2014 SNPRM

As with the commenters to the 2011 NPRM, many commenters to the SNPRM wanted an exception for small fleets and owner operators, including one-truck/one-driver operations.

3. FMCSA Response

For those motor carriers whose drivers engage in local operations, ELD use would be required only if a driver operates outside the timecard provisions of part 395 for more than 8 days of any 30-day period. The requirement would be applicable to the specific driver rather than the fleet. FMCSA notes that its safety requirements generally do not vary with the size of the fleet and the ELD rulemaking should not deviate from that practice. While Federal agencies are required to consider the impact of their rulemakings on small businesses, as defined by the Small Business Administration's size standards (discussed later in the preamble under the Regulatory Flexibility Act analysis), FMCSA is not required or expected to provide an exception to its safety rules based solely on the fact that the businesses are small. This approach also is consistent with the provisions of MAP–21 (49 U.S.C. 31137), which does not distinguish between motor carriers or their drivers based on the size of their operations.

Today's technical specifications require that all ELDs be integrally synchronized with the engine. However, the rulemaking does not preclude the use of smart phones or similar devices which could achieve integral synchronization, including wireless devices.

In response to the National Limousine Association, FMCSA notes that the Agency is required to consider the impact of its proposed regulations on small businesses. See XIV. B. (Regulatory Flexibility Act), below. However, it is not required to perform analyses for particular industry sectors.

F. Exceptions for CMVs Under 26,001 Pounds or Carrying Between 9 and 15 Passengers (Including the Driver)

1. Comments to the 2011 NPRM

Although the NPRM did not propose an exception to the ELD requirement for drivers engaged in operating CMVs under 26,001 pounds or vehicles handling between 9 and 15 passengers, the NFIB believed FMCSA should provide an exception for drivers operating CMVs with a gross vehicle weight under 26,001 pounds. The NFIB stated that the rule would disproportionately affect small business and fails to follow Executive Order 13563. It stated that an ELD would have ''little or no positive effect on highway safety for small trucks and vans.'' For many small plumbing, electrical, and other service providers, the NFIB wrote that the cost would be extremely prohibitive. It believed that many other factors provide incentives for the small business owner to use medium trucks responsibly, including market factors and the fact that they live and drive within the community.

2. Comments to the 2014 SNPRM

The SNPRM would require a driver of a CMV, as defined in 49 CFR 390.5, who is subject to the HOS regulations to use an ELD, unless the driver operated under the short-haul exception or qualified for the 8 out of 30 day exception. Thus, it would include a CMV under 26,000 pounds or a CMV designed or used to transport between 9 and 15 passengers (including the driver) for direct compensation.

Commenters had questions and concerns about how the proposed rules would affect light-duty vehicles. An individual commenter and the AGC suggested that the ELD requirement only apply to vehicles of a size requiring a driver with a CDL. Both commenters wrote that drivers operating vehicles between 10,000 and 26,001 pounds are usually engaged in short-haul operations; and, when a log is required, it is likely because they are on duty more than 12 hours or do not start and stop in the same location. While FMCSA regulations apply only to interstate operations, commenters wrote that most States will adopt the rules for intrastate operations. They believed that ELDs will then be required in almost all vehicles rated over 10,001 pounds, which includes 1-ton pickups and 1-ton and up work trucks where, they maintain, fatigue is not an issue. The commenters believed that this would create an undue financial burden.

NLA proposed that vehicles designed or used to transport between 9 and 15 passengers (including the driver) should be exempt. The association noted that the Department of Transportation provides relief for these types of vehicle and their drivers under 49 CFR parts 40, 171–180, 382, 383, and 397. The association also commented that a vehicle designed to carry 15 or fewer passengers is not substantially different from the driving characteristics of a privately operated vehicle of the same size.

The NFIB recommended exempting CMVs with gross vehicle weights (GVW) of less than 26,001 pounds from the ELD requirement. The NFIB's comments to the SNPRM largely echoed their comments to the NPRM. They also stated that since these regulations are only imposed on drivers engaged in commerce, the same driver, driving the same vehicle, along the same route would be regulated differently depending on whether the vehicle is being used for personal or business purposes. The NFIB stated that this decision to regulate drivers engaged in commerce is based on an assumption with no support; namely, that being ''in commerce'' has an adverse effect on the driver's ability to drive the same vehicle that may be driven for personal uses.

3. FMCSA Response

FMCSA acknowledges the commenters' concerns but continues to believe the underlying HOS recordkeeping requirements should not be altered, which in turn, limits the Agency's discretion in considering relief from the ELD mandate. MAP–21 requires that the Agency impose the ELD mandate on drivers who prepare handwritten RODS. Safety would not be enhanced by creating a new category of relief from the RODS requirements. Regardless of the size of the vehicles being operated, any driver who is unable to satisfy the eligibility criteria for the short-haul exception must use RODS.

FMCSA continues to grant relief in the form of an exception in § 395.1(e) to those drivers operating in ''short-haul'' operations. Drivers who infrequently need to keep RODS (*i.e.,* no more than 8 days in any 30-day period), may continue relying on paper RODS. However, because the Congressional mandate to require ELDs extends to CMVs as defined under 49 U.S.C. 31132, FMCSA declines to limit the regulation to CMVs over 26,000 pounds or exempt small passenger vehicles.

G. ELDs Only for Unsafe Carriers or Drivers

1. Comments to the 2011 NPRM

In the February 2011 NPRM, FMCSA requested comments on the potential advantages, disadvantages, and practicality of an exception from the EOBR requirements for motor carriers with few or no HOS violations. Many commenters supported the contention in the 2010 rule and believed that FMCSA should not mandate EOBRs for safe drivers or motor carriers. Other commenters felt that an exception should be available for safe drivers or motor carriers.

A number of commenters, including several trade associations, supported limiting the EOBR mandate to carriers with severe or chronic HOS violations. Other commenters, however, stated that a potential exemption from the EOBR requirement based on a lack of HOS violations ''would result in endangering truck drivers and the motoring public.'' They argued that just because a company does not have a documented history of violations does not mean that violations have not occurred.

2. Comments to the 2014 SNPRM

In the SNPRM, the Agency did not propose an exception based on HOS compliance history. Nonetheless, some commenters felt that experienced drivers or drivers with a history of safe driving should not be required to use an ELD.

3. FMCSA Response

FMCSA acknowledges commenters' concerns, but the Agency disagrees with the suggestion to provide an exception for experienced drivers with good safety records. Such an exception would be difficult to craft with regard to criteria for identifying eligible drivers and difficult to enforce. Furthermore, in enacting the MAP–21 provision requiring that the Agency mandate the use of ELDs, Congress did not predicate that requirement on any ''safe driving'' threshold.

VIII. Discussion of Comments Related to Supporting Documents

A. Definition and Number

Section 113 of the Hazardous Materials Transportation Authorization Act of 1995 (HMTAA) [16] requires the Secretary to adopt regulations under 49 CFR part 395 to address supporting documents used by motor carriers and authorized safety officials to verify a CMV driver's RODS in order to improve compliance with HOS rules. Among other requirements, the regulations are to describe identification factors that enable documents to be used as supporting documents, specify ''the number, type, and frequency'' of supporting documents that must be retained by a motor carrier, allow verification at a reasonable cost, and prescribe a minimum retention period of 6 months. The statute defines ''supporting document'' as ''any document that is generated or received by a motor carrier or [CMV] driver in the normal course of business that could be used, as produced or with additional identifying information, to verify the accuracy of a driver's [RODS].''

1. Comments to the 2011 NPRM

The 2011 NPRM proposed limiting the supporting documents a motor carrier would need to retain and defining the term ''supporting document.'' The proposal recognized that driving time information would be provided through the mandated use of EOBRs in CMVs.

FMCSA proposed in the NPRM to define ''supporting document'' in a way similar to the definition in section 113(c) of the HMTAA. Only one document would have been needed for the beginning and end of each ODND period if that document contained all the necessary elements—personal identification, date, time, and location. Otherwise, the motor carrier would have been required to retain several documents—enough to show collectively all the necessary information.

ATA, Werner Enterprises, Inc. (Werner), and Roehl Transport found the proposed definition too broad, too expensive, and overly burdensome. ATA commented that the definition did not allow for compliance at a ''reasonable cost,'' as required by HMTAA. The commenters believed the NPRM provisions could actually increase the burden for retaining supporting documents. The commenters also questioned why the definition from the HMTAA contained a reference to documents received from the CMV driver and the proposed definition of ''supporting documents'' in the NPRM did not. One commenter preferred the definition from the HMTAA. The commenters stated that at least some of the data elements are usually missing from documents created or received in the normal course of business. With the exception of hazardous material motor carriers, several motor carriers believed that documents to verify ODND were inadequate or unreliable.

ATA wrote that the Agency's attempt to limit supporting document retention to a single document is ''unrealistic,'' and that motor carriers would have to keep a broad range of multiple documents. One motor carrier commented that the Agency should not require a minimum number of documents. Another large motor carrier commented that the NPRM provided ''no guidance as to how many documents must be included.'' The commenter wrote that the NPRM could be interpreted as requiring ''all'' documents, records, and information generated or received by the motor carrier in the normal course of business.

2. Comments to the 2014 SNPRM

At the SNPRM stage, FMCSA significantly modified its proposal governing supporting documents. The revised proposal would limit the supporting documents that a motor carrier must retain by specifying a maximum number and provide categories and required elements for supporting documents. Like the NPRM, the Agency's proposal did not require motor carriers to retain supporting documents to verify driving time because the ELD would automatically capture this information. The Agency's proposal did, however, require motor carriers to retain, for each driver, supporting documents to verify a driver's ODND periods. In terms of number and frequency, FMCSA would require a motor carrier to retain up to 10 documents for a driver's 24-hour period. Electronic mobile communication records covering a driver's 24-hour period would count as a single document. Other types of supporting documents that are relevant to distinct activities—such as a bill of lading for a particular delivery or an expense receipt—would count as an individual document, as explained under Section VIII, B, Categories. If a driver were to submit more than 10 documents for a 24-hour period, the motor carrier would need to retain the documents containing earliest and latest time indications. If the supporting document cap were not reached, the motor carrier would be required to keep all of the supporting documents for that period. While the Agency proposed a single supporting document standard for drivers using ELDs, drivers who continued to use paper RODS would need to also retain all toll receipts.

The IBT stated its support for the supporting document proposal, as ELDs do not automatically record ODND and other duty status periods. The CVSA also supported the proposed supporting document provisions.

[16] Public. Law 103–311, 108 Stat. 1673, 1676–77 (August 26, 1994).

ATA, however, noted that the number and type of supporting documents has consistently increased. It claimed that the requirements in the SNPRM were excessive and unnecessary and do not fulfill the Congressional directive to allow for compliance at a reasonable cost to carriers. It recommended that two supporting documents be required per driver's workday—the one nearest the start of the day and the one nearest the end—sufficient to verify the 14-hour rule. ATA noted that, according to a prior FMCSA HOS rulemaking, only a small percentage of drivers operate near the cumulative 60/70 hour duty time limit,[17] and that fact does not justify FMCSA's proposal for motor carriers to retain supporting documents for all mid-shift duty changes. The Truckload Carriers Association (TCA) also suggested that the only other supporting documents that should be retained are the documents closest to the beginning and the end of the driver's workday.

The American Bus Association (ABA) proposed limiting the supporting document requirement to five documents from three categories. FedEx suggested that motor carriers should only be responsible for fuel data plus one other supporting document type, if one exists. Knight Transportation, Inc. (Knight) noted that enforcement generally relies on no more than two to three supporting documents. The American Moving & Storage Association (AMSA) noted that, in the case of household goods drivers, ODND time is likely to be extensive and requested that the required supporting documents be kept to a minimum and simplified to the extent possible.

The International Foodservice Distributors Association, the Snack Food Association, and an individual commenter noted that the location and tracking functions in the ELDs should eliminate the need for additional paperwork. They therefore recommended elimination of supporting document requirements. The National Waste & Recycling Association suggested a total exemption from the supporting documents requirement for local routes.

FedEx suggested that FMCSA wait to modify the rule on supporting documents until after the ELD rule has been in effect long enough to determine if drivers are falsifying their ODND time on ELDs and if crashes are occurring as a direct result of drivers improperly recording ODND time.

The Institute of Makers of Explosives (IME) and the National Private Truck Council both asked FMCSA to continue to look at supporting document requirements with an eye to providing more flexibility and considering additional means to reduce the compliance burden on carriers.

Other commenters mistakenly believed that FMCSA asserted that the proposed supporting document changes will reduce paperwork. Drivers and carriers will still have to retain certain documents for other business purposes.

In terms of the 10-document cap, ATA noted that, because it is rare for any document to reflect all of the required elements, carriers would have to substitute documents containing all required elements except time, which are not subject to the 10-document daily cap. As such, the 10-document cap is a benefit in theory only and provides no actual relief from the HOS supporting documents requirements.

3. FMCSA Response

As explained in the 2014 SNPRM, FMCSA made major changes to the proposed supporting documents regulations based upon public comments submitted in response to the NPRM. The Agency disagrees with commenters that suggest that the number of required supporting documents has been increased through the 2014 SNPRM. This final rule does not change the fundamental nature of supporting documents; they are records generated in the normal business rather than documents created specifically to verify the duty status of a driver. Because supporting documents used to verify driving time would no longer be required of carriers that use ELDs, some carriers subject to the ELD mandate would end up having fewer supporting documents than they were required to retain before today's rule. And whenever possible, FMCSA tried to reduce the costs and complication of retaining supporting documents without compromising the efficiency in ensuring HOS compliance.

In today's rule, the definition of ''supporting document,'' makes clear that a document can be in ''any medium,'' consistent with the SNPRM. (The reference to CMV driver in HMTAA is not repeated because a driver's obligations are addressed in substantive provisions concerning supporting documents.) In addressing the frequency requirement, the Agency tied the cap to a driver's 24-hour period. While the SNPRM proposed a 10 document cap, FMCSA reduced the supporting document cap to eight documents in today's rule. This definition, combined with clearer categories, and a reduced number of required documents, will allow drivers and carriers to comply at a reasonable cost.

While FMCSA appreciates the desire to eliminate supporting documents or to wait until after widespread ELD use before implementing the requirement, FMCSA does not believe that the ELD eliminates the need for supporting documents. Today's rule requires the retention of supporting documents generated or received in the normal course of business—an essential resource for both authorized safety officials and motor carriers to verify compliance with the HOS rules. Supporting documents are critical in checking ODND periods. FMCSA acknowledges that motor carriers retain supporting documents for reasons other than verifying compliance with the HOS rules, including complying with the rules of other agencies. Thus, the Agency did not project in the SNPRM or in today's rule any paperwork savings associated with the supporting documents provisions.

In terms of the number of documents employed in on-site enforcement interventions or investigations, the Agency uses all types of supporting documents to evaluate a driver's RODS. Because of the scope of transportation activities and the range of documents, enforcement authorities cannot effectively evaluate the accuracy of a driver's RODS based on a maximum of two to three supporting documents per duty day. FMCSA recognizes the number of supporting documents obtained daily may vary based upon the driver's activities. By establishing a maximum of eight supporting documents this rule promotes safety by ensuring that authorized safety officials have the opportunity to evaluate effectively the driver's RODS and HOS compliance.

Limiting required supporting documents to the start and end of the workday is not adequate for ensuring HOS compliance especially with regard to on-duty, not driving periods. Documents acquired throughout the day are important in the enforcement of the 60/70-hour rule—a crucial part of ensuring HOS compliance. Compliance with the 60/70-hour rule limits is based on how many cumulative hours an individual works over a period of days. Supporting documents are critical in helping to verify the proper duty statuses for an individual in calculating compliance with the 60/70 hour rules. FMCSA notes that, absent sufficient documents reflecting each element,

[17] Although this fact was attributed to FMCSA, the statement apparently reflected the commenter's view and not necessarily that of the Agency.

documents lacking time would count in applying the 8-document cap.

B. Categories

1. Comments to the 2011 NPRM

The NPRM proposed four categories of supporting documents: (1) Payroll, (2) trip-related expense records and receipts, (3) FMS communication logs, and (4) bills of lading or equivalent documents.

Some commenters said the four categories represented a significant expansion of the existing requirement. These commenters stated that the four categories were confusing, vague, and unjustifiably burdensome, and instead suggested short, specific lists of documents. FedEx said that a short list of supporting documents, used in the Compliance Review process, would hold all carriers to the same standard. ATA said that a short list might be more effective in getting motor carriers to retain supporting documents. OOIDA cautioned that small-business motor carriers, particularly sole proprietors, might not maintain payroll or expense records, or use an FMS or communications logs.

Many commenters agreed with the Agency that EOBRs would make supporting documents related to driving time unnecessary. Other commenters, however, recommended that the Agency continue to require supporting documents for driving time. A driver said that supporting documents reflecting drive time show whether routes conformed to speed limits, or if a driver was speeding to achieve company productivity standards. The American Association for Justice wanted the Agency to continue requiring supporting documents for driving time to guard against EOBR equipment failure, drivers and motor carriers abusing the system, and multiple drivers using one truck. The Association also wanted FMCSA to require motor carriers to notify GPS providers immediately after a crash and to require GPS providers to retain crash-related data for 6 months.

2. Comments to the 2014 SNPRM

Based on comments received to the NPRM, FMCSA modified the description of the categories of required supporting documents in the SNPRM. For every 24-hour period a driver is on duty, the motor carrier would be required to retain a maximum number of supporting documents from the following five categories: (1) Bills of lading, itineraries, schedules, or equivalent documents that indicate the origin and destination of each trip; (2) dispatch records, trip records, or equivalent documents; (3) expense receipts related to ODND time; (4) electronic mobile communication records reflecting communications transmitted through an FMS for the driver's 24-hour duty day; and (5) payroll records, settlement sheets, or equivalent documents that indicate what and how a driver was paid. Drivers who continue to use paper RODS would also need to retain toll receipts.

The ATA, the IME, and others supported FMCSA's proposal to relieve motor carriers of the requirement to retain supporting documents to verify on-duty driving time. ATA pointed out that because ELDs are synchronized with the vehicle, they consistently, reliably, and automatically capture vehicle movement, and the potential for underreporting driving time is minimal, if not non-existent.

NTSB, however, noted that it has found toll information, such as EZ Pass data and toll receipts, to be some of the most reliable information in verifying HOS compliance. It recommended that FMCSA consider specifically listing toll receipts and electronic toll data in the five categories of required supporting data. As to the requirement that drivers who continue to use paper RODS still need to retain toll receipts, FedEx suggested that FMCSA allow motor carriers to retain either toll receipts or trip dispatch records, so long as those documents are created in the ordinary course of business.

3. FMCSA Response

The role of supporting documents is to improve HOS compliance by providing verifiable records to compare with the RODS to ensure the accuracy of the information entered by the driver. Given the broad diversity of motor carrier and CMV operations, the Agency does not believe that a specific list of supporting documents is appropriate for verifying compliance with the HOS regulations. FMCSA intends the five categories of supporting documents to accommodate various sectors of the industry. Although ELDs eliminate the need for supporting documents that reflect driving time, supporting documents are important in reconstructing a driver's ODND time and other duty statuses—a key element in overall HOS compliance, most notably as it relates to the 14-hour and weekly on-duty limits. FMCSA believes that the five categories proposed in the SNPRM clarified the requirement for supporting documents without compromising the Agency's enforcement abilities. FMCSA did not change the categories of documents required in today's rule.

FMCSA also believes that the listed categories of supporting documents, combined with the reduced cap of eight documents per duty day, will not result in an unreasonable burden. FMCSA notes that two categories—electronic mobile communications and payroll records—will typically not be documents a driver would have to physically retain, and may be a part of a larger record that the carrier already has to retain electronically or physically at the dispatch location or principal place of business.

FMCSA eliminates the requirement to retain supporting documents, such as toll receipts, that verify on-duty driving time for drivers using ELDs. Given that ELDs will adequately track driving time, requiring such documents would be redundant and would not further the purpose of this rule, which is to improve HOS compliance.

FMCSA does not create a new requirement that GPS records be preserved after a crash. The Agency currently requires that RODS and supporting documents be retained for 6 months after receipt and this requirement does not change in today's rule. Crash records are addressed in a separate regulation.

FMCSA emphasizes that drivers using paper RODS must also keep toll receipts. These drivers are not required to use ELDs, and, absent an ELD, this documentation of driving time is necessary. Required toll receipts do not count towards the eight-document cap.

C. Data Elements

1. Comments to the 2011 NPRM

The February 2011 NPRM was based on an assumption that only one supporting document—containing driver name or identification number, date and time, and location—would be needed for the beginning and end of each ODND period within the duty status day. Absent a document containing all four elements, a carrier would have been required to retain sufficient individual documents from specified categories.

Commenters suggested that the proposed requirements would demand a significant expansion of their current recordkeeping responsibilities. Commenters also stated that at least some of the proposed data elements are usually missing from documents created or received in the normal course of business. Based on its research, one commenter said that only drug testing control and custody forms, fuel receipts, and roadside inspection reports provide

any of the proposed data elements useful in verifying ODND activity. Because such a supporting document is rare, some commenters stated that motor carriers would be forced to retain multiple documents. ATA wrote that the Agency's attempt to limit supporting document retention to a single document is ''unrealistic'' and that motor carriers would have to keep many—and a broad range of—documents. Another commenter wrote that the NPRM could be interpreted as requiring ''all'' documents, records, and information generated or received by the motor carrier in the normal course of business.

2. Comments to the 2014 SNPRM

In the SNPRM, FMCSA modified the data elements that a document must contain to qualify as a supporting document. FMCSA agreed with ATA and other commenters that relying on a single document is generally unrealistic. Further, the SNPRM prescribed how the necessary elements related to the document retention cap. The proposed data elements were: (1) Driver name or carrier-assigned identification number, either on the document or on another document enabling the carrier to link the document to the driver, or the vehicle unit number if that number can be linked to the driver; (2) date; (3) location (including name of nearest city, town, or village); and (4) time. If sufficient documents containing these four data elements were not available, a motor carrier would be required to retain supporting documents that contain the driver name or motor carrier-assigned identification number, date, and location.

Schneider requested clarification about whether a document that does not contain the four data elements would meet the definition of a supporting document and need to be retained. Schneider noted that the only documents that have all four data elements are expense receipts, like fueling, drug and alcohol chain-of-custody forms, and accident reports. Schneider also noted that bills of lading, dispatch records, and pay records do not contain a start time or end time and, in some cases, location information. As such, those documents do not verify a driver's duty record.

3. FMCSA Response

FMCSA understands Schneider's comment that some categories of document may not contain some of the data elements. We believe, however, that the driver identifier, date, and location are crucial elements in HOS compliance. If a motor carrier has fewer than eight documents containing all four data elements, a document would qualify as a supporting document if it contains each data element, except time. Under this scenario, a document lacking time would nonetheless count in applying the 8-document cap.

D. Supporting Document Exemption for Self-Compliance System

1. Comments to the 2011 NPRM

The NPRM included a provision to authorize, on a case-by-case basis, motor carrier self-compliance systems, as required by section 113(b)(4) of HMTAA. The statute requires FMCSA to provide exemptions for motor carriers to use qualifying ''self-compliance systems'' instead of retaining supporting documents. FMCSA proposed using the procedures already in 49 CFR part 381, subpart C, Exemptions, to consider requests for exemption from the retention and maintenance requirements for supporting documents. In the NPRM, the Agency asked commenters to describe their current self-compliance systems or the systems they might anticipate developing.

Klapec and Werner said they had self-compliance systems. One provided some details on its auditing procedures. Several commenters were concerned that the number of companies seeking exemptions for self-compliance systems could severely test the Agency's ability to respond. The Truck Safety Coalition and Advocates recommended rulemaking to provide minimum requirements for self-compliance systems. Advocates also wanted an explanation of how parts 381 and 395 would interact. A motor carrier recommended an expedited system for approval of a carrier's self-compliance exemption. Although ATA believed that using the part 381 process made sense, it was skeptical that FMCSA intends to consider such applications seriously.

2. Comments to the 2014 SNPRM

The SNPRM re-proposed the same self-compliance system proposed in the NPRM. ATA and the Ohio Trucking Association (OTA) commented on the self-compliance systems proposal. ATA stated that it supports the proposed self-compliance system process and appreciates the non-prescriptive approach and flexibility it provides. However, the OTA stated that FMCSA should develop and write requirements for the self-compliance system process with comments from the public and the industry rather than forcing each individual carrier to develop its own proposal. OTA stated that with no guidance, motor carriers will be in the position of guessing what FMCSA might find acceptable and going through a long and often costly process of responding to FMCSA questions and public comment.

3. FMCSA Response

In today's rule, the Agency retains the self-compliance option as it appeared in the NPRM and SNPRM. In 49 CFR 395.11(h), FMCSA authorizes, on a case-by-case basis, motor carrier self-compliance systems. A motor carrier may apply for an exemption under existing part 381 provisions for additional relief from the requirements for retaining supporting documents. Because part 381 rules and procedures were developed in response to Congressional direction contained in section 4007 of the Transportation Equity Act for the 21st Century [18] and already contain detailed requirements concerning the application and review processes for exemptions,[19] the Agency does not create a separate process for exemptions related to part 395 regulations. In response to commenters who asked if this would test FMCSA's resources, FMCSA is confident that the Agency would be able to comply with the requirements of HMTAA. Given the diversity of the industry, FMCSA continues to believe that a non-prescriptive, flexible standard to achieve compliance is appropriate, and does not establish minimum standards for a self-compliance system.

E. Supporting Document Management

1. Comments to the 2011 NPRM

FMCSA's NPRM proposal would require motor carriers and CMV drivers to share responsibility for complying with the proposed supporting document requirements. The NPRM proposed that drivers submit supporting documents to a motor carrier within 3 days or, in the case of electronic records, within a single day. A motor carrier would be required to maintain an HOS management system to detect violations of the HOS rules. The motor carrier would be required to retain supporting documents for its drivers for a period of 6 months.

A commenter objected to any requirement that a motor carrier collect from the CMV driver documents of a personal nature generated during the course of business to be used as supporting documents. The commenter also objected to any obligation on the driver or the motor carrier ''to alter, annotate or assemble documents from

[18] Public Law 105–178, 112 Stat. 107 (June 9, 1998).

[19] See 63 FR 67608, December 8, 1998.

the form in which they are generated in the normal course of business.'' OOIDA noted that small carriers may not keep certain records that would qualify as supporting documents. OOIDA asked FMCSA to clarify the requirements, including whether drivers or motor carriers would be required ''to note the missing information on these documents.''

2. Comments to the 2014 SNPRM

Like the NPRM, the SNPRM would require motor carriers and CMV drivers to share responsibility for complying with the proposed supporting document requirements. However, based on comments to the NPRM, the supporting document provisions were changed. The proposed HOS management system was among the provisions eliminated in the SNPRM. The definition and requirements governing ''supporting document'' were clarified. FMCSA extended the proposed time in which a driver would be required to submit his or her supporting documents to the employing carrier to 8 days, consistent with the proposed submission period for RODS. Proposed § 395.11(e) required a motor carrier to retain supporting documents in a way that allows them to be ''effectively matched'' to the corresponding driver's RODS. However, a motor carrier would still need to retain supporting documents received in the course of business for 6 months.

ATA opposed the requirement that carriers retain supporting documents in a way that allows them to be effectively matched to the corresponding driver's RODS. Although ATA believed it was reasonable to expect that carriers not deliberately make matching difficult or frustrate investigators, it noted that ''to require that carriers go beyond 'retaining' records (keeping them in the manner in which they receive them) to 'maintaining' them (by ensuring that they can be easily matched by an investigator) goes a step too far.'' ATA stated that responsible motor carriers should not have to manipulate the manner in which a supporting document is retained or be held accountable for not facilitating such matching if there is no evidence of HOS violations. ATA also noted that the requirement that drivers submit supporting documents to their employing carriers within 8 days creates an imbalance with the existing regulation that requires drivers who keep paper logs to submit those logs and supporting documentation to their employing carriers within 13 days. ATA suggested that all drivers should be required to submit supporting documents within 13 days of receipt.

FedEx asked that FMCSA clarify whether a carrier would be out of compliance with the regulation if it had no supporting documents kept in the carrier's ordinary course of business that fit the description of a supporting document under the rule. FedEx also suggested that FMCSA clarify what it means for a supporting document to be ''effectively matched'' to the corresponding driver's HOS records.

CVSA recommended that FMCSA require CMV drivers to keep the proposed supporting documents for the current and past 7 days with them in the vehicle, so that roadside inspectors could have access to the documents to verify location, time, and date of all driver duty status entries.

3. FMCSA Response

In today's rule, FMCSA expanded the deadline for drivers to submit supporting documents to the motor carrier from 8 days to 13 days, consistent with the current period for submission of RODS. While FMCSA does not require that drivers retain supporting documents in the CMV for a prescribed period, it does require that a driver make any supporting document in the vehicle available to an authorized safety official if requested during roadside inspections. FMCSA believes this approach achieves a reasonable and workable balance between the needs of enhanced enforcement during roadside inspections and not requiring that motor carriers modify their current document management practices.

FMCSA notes that a motor carrier is not required to create supporting documents not otherwise generated or received in the normal course of business or to annotate such documents in any manner. But a motor carrier or driver may not obscure, deface, destroy, mutilate, or alter existing information found on a supporting document.

Today's rule does not require establishment of a new record management system specifically for supporting documents. However, the rule retains the requirement that supporting documents be retained in a manner that allows them to be effectively matched to the driver's RODS. This is a long-existing requirement, well documented in the Agency's administrative decisions. The purpose is to enable a motor carrier, as well as authorized safety officials, to verify a driver's RODS. (See *e.g., In the Matter of Bridgeways, Inc.,* Docket No. FMCSA–2001–9803–0009 (Final Order June 1, 2004)).[20] Agency decisions make clear that a motor carrier cannot take supporting documents that permit identification of a driver, but then store them in a manner or sanitize them so the ability to link individual documents to the driver is lost. See *Darrell Andrews Trucking, Inc. Docket No. FMCSA–2001–8686–21 (Final Order Under 49 CFR 385.15, January 19, 2001), aff'd in part, vacated in part, Darrell Andrews Trucking, Inc.* v. *Fed. Motor Carrier Safety Admin.,* 296 F.3d 1120 (D.C. Cir. 2002), *remanded to* Docket No. FMCSA–2001–8686–26 (Final Order on Remand, Mar. 14, 2003); *see also In the Matter of A.D. Transport Express, Inc.,* Docket No. FMCSA–2002–11540–1 (Final Order Under 49 CFR 385.15, May 22, 2000), *aff'd, A.D. Transport Express, Inc.* v. *Fed. Motor Carrier Safety Admin.,* 290 F.3d 761 (6th Cir. 2002).

[20] Available at *http://www.regulations.gov.*

F. Requirements When ELDs Malfunction and Requests for Clarification Regarding State Laws

1. Comments to the 2014 SNPRM

Greyhound Lines, Inc. (Greyhound) and Schneider National, Inc., asked for clarification on various parts of the proposed rule. Greyhound asked FMCSA to make it clear that States may not impose supporting document standards that are more specific than, or different from, the Federal standard. Schneider requested clarification on whether toll receipts would be expected for days where a driver is completing a paper ROD due to an ELD malfunction. Schneider noted that, given the size of its fleet, it will experience regular device malfunctions, and it will consequently have to keep all toll receipts for all drivers to ensure it is in compliance on those days where malfunctions occur.

2. FMCSA Response

State laws or regulations addressing supporting documents are not necessarily preempted by Federal law. The FMCSRs are ''not intended to preclude States or subdivisions . . . from establishing or enforcing State or local laws relating to safety, the compliance with which would not prevent full compliance with [the FMCSRs] by the person subject thereto.'' 49 CFR 390.9. However, as a condition of Federal funding under the MCSAP, a State must have rules in place compatible to Federal regulations adopted under the 1984 Act, subject to certain exceptions. See parts 350 and 355 of 49 CFR. Subject to permissible variances, a State law or regulation found by the Secretary of Transportation to be less stringent than its Federal counterpart cannot be enforced; a State law or regulation more stringent than its

Federal counterpart may be enforced unless the Secretary decides the State law or regulation has no safety benefit, is incompatible with the Federal regulation, or would cause an unreasonable burden on interstate commerce. 49 U.S.C. 31141(c). A motor carrier such as Greyhound that believes a State law or regulation is incompatible with the FMCSRs may petition FMCSA for review of the matter and the State's eligibility of MCSAP funding. 49 CFR 350.335(d). Therefore, the Agency does not address the preemption of State supporting document requirements in this rulemaking.

Today's rule requires a motor carrier to retain toll receipts for a driver who keeps paper RODS in lieu of using an ELD. However, the Agency does not expect a carrier to modify its supporting document retention policy whenever a driver who regularly uses an ELD needs to complete paper RODS for a brief period due to an ELD malfunction.

IX. Discussion of Comments Related to Harassment

A. Background and 2011 NPRM

1. Background

In enacting the Truck and Bus Safety and Regulatory Reform Act of 1988, Congress required that regulations addressing onboard monitoring devices on CMVs ensure that the devices not be used to harass CMV drivers. However, the devices may be used to monitor productivity.[21] In its challenge to the April 2010 EOBR rule in the U.S. Court of Appeals for the Seventh Circuit, OOIDA raised several issues, including the Agency's failure to ensure that electronic recorders not be used to harass CMV drivers. While the Seventh Circuit litigation was pending, FMCSA published the February 2011 NPRM. By notice published on March 10, 2011 (76 FR 13121), the Agency extended the public comment period for the 2011 NPRM to May 23, 2011.

2011 Notice and Request for Additional Public Comment

The Agency believed that it appropriately addressed the issue of harassment in accordance with the statute, both in the April 2010 rule that was the subject of litigation and the subsequent February 2011 NPRM, focusing on harassment in the context of drivers' privacy concerns. However, in reaction to the litigation and to public comments in response to the NPRM, on April 13, 2011, the Agency published a notice requesting additional comments on harassment (76 FR 20611). FMCSA wanted to ensure that interested parties had a full opportunity to address this issue. The notice explicitly requested information about driver experiences with harassment. The notice asked if the same activities considered harassing might also be considered monitoring for productivity. It questioned if these same activities might be barred by other existing provisions, and if additional regulations were needed. The notice also asked about the role that electronic recorders might play in the ability of carriers, shippers, and others to pressure drivers to violate HOS regulations.

Seventh Circuit Decision

On August 26, 2011, the court vacated the April 2010 rule (*Owner-Operator Indep. Drivers Ass'n* v. *Fed. Motor Carrier Safety Admin.,* 656 F.3d 580 (7th Cir. 2011)). The court held that, contrary to the statutory requirement, the Agency failed to address the issue of driver harassment, namely, how the Agency would distinguish between harassment and productivity, how harassment occurs, and how harassment would be prevented.

On May14, 2012, following the court's decision, FMCSA issued a rule that removed the vacated language from 49 CFR (77 FR 28448). Motor carriers relying on electronic devices to monitor HOS compliance are currently governed by the rules addressing the use of AOBRDs in effect immediately before the court's ruling (49 CFR 395.15). These provisions were not affected by the Seventh Circuit's decision.

Public Listening Sessions

FMCSA conducted two public listening sessions to better understand drivers' concerns about harassment. The first was in Louisville, Kentucky, on March 23, 2012, at the Mid-America Truck Show. The second was in Bellevue, Washington, on April 26, 2012, at the CVSA Workshop. FMCSA heard from commenters, both those in attendance and those participating through the Internet, who offered varied opinions on the implementation and use of electronic recorders. Commenters at the Louisville session included drivers, representatives of motor carriers, owner-operators, and representatives of OOIDA. At the Bellevue session, FMCSA specifically sought the input of State MCSAP agencies because of their role in enforcing the HOS rules and familiarity with electronic recording devices and other technical issues. Additional participants in the Bellevue public listening session included drivers, representatives of motor carriers and other business entities, representatives of the motor carrier industry organizations, authorized safety officials, and other State agency representatives. Transcripts of both sessions are available in the docket for this rulemaking. Web casts are archived at: *http://www.tvworldwide.com/events/dot/120323/* and *http://www.tvworldwide.com/events/dot/120426/*, respectively.[22]

MAP–21

In July 2012, Congress enacted MAP–21, mandating that the Agency adopt regulations requiring that certain CMVs be equipped with ELDs.[23] As part of this legislation, Congress defined ''electronic logging device'' and required that regulations ''ensur[e] that an electronic logging device is not used to harass a vehicle operator.'' 49 U.S.C. 31137(a)(2) and (f)(1). The legislation eliminated the prior reference to ''productivity.''

2. Comments to the 2011 NPRM

Given the intervening events between issuance of the NPRM and the SNPRM, including the Seventh Circuit decision and enactment of MAP–21, and the fact that the SNPRM regulatory text superseded the text included in the NPRM, FMCSA's comment analysis focuses on comments submitted to the SNPRM.

B. General

1. Comments to the 2014 SNPRM

In accordance with the MAP–21 mandate, the 2014 SNPRM addressed harassment, in part, through the new technical specifications. Among the technical specifications intended to address harassment, the Agency included a mute function available during sleeper berth periods, edit rights, and requirements addressing transparency and driver control over editing. The complaints of drivers focused mainly on pressures from motor carriers. Based on their concerns, the Agency also proposed procedural provisions aimed at protecting CMV drivers from actions resulting from information generated by ELDs, since not every type of complaint suggested a technical solution.

Several commenters stated that the SNPRM provisions adequately addressed the issue of driver

[21] Public Law 100–690, Title IX, Subtitle B, sec. 9104(b), 102 Stat. 4527, 4529 (November 18, 1988). This provision was subsequently revised and codified at 49 U.S.C. 31137(a) by Public Law 103–272, 108 Stat. 745, 1004 (July 5, 1994).

[22] In addition to the formal comment process and listening sessions, FMCSA also conducted a survey of drivers and motor carriers to better understand perceptions on the harassment issue, See Section XII. L of this preamble.

[23] Public Law 112–141, sec. 32301(b), 126 Stat. 405, 786–788 (July 6, 2012) (amending 49 U.S.C. 31137).

harassment. Advocates wrote that the SNPRM fulfilled the Agency's obligation following the decision of the U.S. Court of Appeals. Continental stated that the SNPRM has adequately addressed the issues of data privacy. The National Shippers Strategic Transportation Council supported FMCSA's approach.

Some commenters wrote that ELDs actually improved the relationship between drivers and dispatchers and decreased tension. Commenters pointed out that ELDs provide transparency, ensure that both drivers and motor carriers have the same information, and keep a record of interactions. OOIDA, however, commented that Congress told the Secretary to ensure that ELDs are not used to harass and that OOIDA believes the SNPRM fell far short of implementing this mandate. In its comments to the NPRM, which are incorporated by reference into OOIDA's comments to the SNPRM, OOIDA suggested specific proposals to address driver harassment.[24] OOIDA also criticized the Agency for addressing the issue of coercion and harassment in separate rulemakings and addressing only harassment related to ELDs required under today's rule.

Some commenters believed ELDs are not intended to improve safety, but only serve as a management tool to track drivers. Some commenters reported the use of FMSs to direct drivers to do unsafe or even illegal things. Other commenters complained that neither FMCSA nor the ELD could prevent harassment by motor carriers. Many drivers complained that the ELD would limit their flexibility, and cause them to drive while tired or stressed.

2. FMCSA Response

FMCSA believes today's rule appropriately implements MAP–21's mandate requiring certain CMV drivers to use ELDs while addressing the concerns expressed about the potential for harassment resulting from ELD use. The rule adopts a clear prohibition against driver harassment, subject to a civil penalty in addition to the penalty for the underlying violation. ELD technologies, including related technologies often employed in FMS, do not necessarily result in driver harassment; nor do they preclude actions that drivers might view as harassing. However, the Agency believes that, on balance, the use of ELDs will protect drivers from pressures to violate the HOS rules by ensuring a better record of drivers' time. As the court noted in the litigation on the 2010 EOBR rule, the term ''harass'' is not defined by statute and requires amplification. 656 F.3d at 588. In order to better understand the nature and context of drivers' harassment concerns, the Agency undertook extensive outreach. The provisions proposed in the SNPRM, and reflected in today's rule, are largely reflective of this outreach. Today's rule includes the definition of ''harassment'' proposed in the SNPRM, that is, ''. . . an action by a motor carrier toward a driver employed by the motor carrier (including an independent contractor while in the course of operating a [CMV] on behalf of the motor carrier) involving the use of information available to the motor carrier through an ELD . . . or through other technology used in combination with and not separable from the ELD, that the motor carrier knew, or should have known, would result in the driver violating § 392.3 or part 395 [of 49 CFR].''

FMCSA acknowledges that harassment and coercion may often appear related. However, it is important to recognize that the statutory basis for each requirement differs. While the harassment provision is linked specifically to ELDs as defined in MAP–21, Congress required that the Agency, in adopting regulations under the 1984 Act, prohibit motor carriers, shippers, receivers, and transportation intermediaries from coercing CMV drivers in violation of specified regulatory provisions. See FMCSA's rule on coercion, published November 30, 2015 (80 FR 74695). The Agency notes, however, that § 395.30(e) of today's rule does prohibit a motor carrier from coercing (as that term is defined in 80 FR 74695) a driver to falsely certify the driver's data entries or RODS.

The Agency encourages any driver who feels that she or he was the subject of harassment to consider the potential application of the harassment provisions adopted today, as well as FMCSA's coercion rule and the remedies available through the Department of Labor, in determining which approach to pursue in light of the specific facts.

The Agency included some of OOIDA's specific proposals to address harassment in today's rule, such as making it unlawful for carriers to use ELDs to harass drivers and establishing procedures for drivers to submit harassment complaints directly to FMCSA. Some of its suggestions went beyond FMCSA's authority, such as the suggestion that we provide for driver compensation for time spent under out-of-service orders in cases where harassment is implicated in the violation. With regard to the suggestion that we promulgate a regulation protecting drivers who complain about harassment from retaliation, we note that such protections already exist under current law. Retaliation protections available to CMV drivers are set forth in 49 U.S.C. 31105, which is administered by the Department of Labor. The Agency declines to link harassment violations to the safety rating process, consistent with the Agency's approach in the coercion rulemaking (80 FR 74695, November 30, 2015). We therefore also decline to adopt OOIDA's suggestion that drivers be permitted to participate in compliance reviews involving harassment. FMCSA believes that harassment complaints can be effectively addressed through the complaint process established through today's rule and through the civil penalty structure.

C. Privacy; Ownership and Use of ELD Data

1. Comments to the 2014 SNPRM

In development of the proposed technical performance requirements, the Agency took into account drivers' privacy interests in the collection and maintenance of data. For example, the proposed requirements included industry standards affecting the handling of data and access requirements, ensuring only authenticated individuals could access an ELD system. These provisions are part of today's rule.

Several commenters expressed concern about how the data collected from ELDs will be used. For example, questions were posed about who owns the data recorded by an ELD, who will see that data, and whether that data will be retained. Commenters also raised concerns about the use of data in private civil litigation. One commenter asked what would preclude law enforcement from using data gleaned from ELDs to charge truck drivers with other violations such as speeding, illegal parking, and driving on restricted routes. Another commenter stated that

[24] OOIDA suggested the following specific proposals to address driver harassment: (1) Establish guidelines for the appropriate use of EOBRs to improve productivity; (2) promulgate a regulation to make it unlawful for motor carriers to use EOBRs to harass drivers; (3) establish procedures for drivers to complain about harassment and create a unit in FMCSA to review and act on complaints; (4) promulgate a regulation protecting drivers who complain about harassment from retaliation; (5) make harassment a factor considered in compliance reviews; (6) permit drivers to participate in compliance reviews involving harassment; and (7) provide for driver compensation for time spent under out-of-service orders where harassment is implicated in the violation.

FMCSA must ensure that data collected for HOS enforcement purposes will not be provided to other government agencies for other purposes.

2. FMCSA Response

An ELD record reflecting a driver's RODS is the driver's record. However, under the FMCSRs, motor carriers are responsible for maintenance of these records for a 6-month period. Thus, drivers and carriers share responsibility for the record's integrity. FMCSA does not presently plan to retain any data captured by an ELD absent documentation of violations during investigations.

In addition to other statutory privacy protections, MAP–21 limits the way FMCSA may use ELD data and requires that enforcement personnel use information collected from ELDs only to determine HOS compliance. See 49 U.S.C. 31137 (e)(1) and (3).[25] U.S. Department of Transportation regulations govern the release of private information, including requests for purposes of civil litigation. 49 CFR parts 7 and 9. Today's rule includes industry standards for protecting electronic data; it also regulates access to such data and requires motor carriers to protect drivers' personal data in a manner consistent with sound business practices. However, FMCSA has limited authority to ensure total protection of information in the custody of third parties.

MAP–21 also requires that the Agency institute appropriate measures to preserve the confidentiality of personal data recorded by an ELD that is disclosed in the course of an FMCSR enforcement proceeding (49 U.S.C. 31137(e)(2)). To protect data of a personal nature unrelated to business operations, the Agency would redact such information included as part of the administrative record before a document was made available in the public docket.

Finally, the Agency notes that Federal law addresses the protection of individual's personally identifiable information maintained by Federal agencies. See the Privacy Impact Assessment for today's rule available in the rulemaking docket.

D. Tracking of Vehicle Location; Real Time Transmission of Data

1. Comments to the 2014 SNPRM

Location recording is a critical component of HOS enforcement. The SNPRM addressed drivers' concerns about the level of data collected for HOS enforcement. FMCSA did not propose a requirement for real-time tracking of CMVs or the recording of precise location information. Instead, location data available to authorized safety officials would be recorded at specified intervals; that is, when the driver changes duty status, indicates personal use or yard moves, when the CMV engine powers up and shuts down, and at 60-minute intervals when the vehicle is in motion. During on-duty driving periods, FMCSA proposed to limit the location accuracy for HOS enforcement to approximately a 1-mile radius. When a driver operates a CMV for personal use, the position reporting accuracy would be further reduced to an approximate 10-mile radius. The SNPRM did not propose that the ELD record and transmit any CMV location data either to the motor carrier or to authorized safety officials in real time.

ATA stated that the proposed precision requirements for monitoring vehicle location are quite reasonable. ATA believed that these requirements should stave off any concern by drivers that records available to law enforcement during roadside inspections will present an intrusion on their privacy, especially since this limited level of location monitoring will prevent law enforcement from knowing the exact location a driver has visited. ATA wrote that respecting this confidentiality may be important in some circumstances, such as when a driver visits a medical specialist. Provided that law enforcement can still reasonably verify HOS compliance, the needs of both parties will be met.

Other commenters, however, asked who would have access to the tracking data. These commenters believed that the tracking was a form of harassment in that it would allow carriers to harass the driver about his or her performance. Other commenters viewed tracking as an invasion of privacy in violation of their constitutional rights.

The NPGA stated that technologies similar to ELDs have previously been under consideration by the Pipeline and Hazardous Materials Safety Administration as one type of technology that can be used in HM transportation security. In comments submitted to an advance notice of proposed rulemaking concerning the need for enhanced security requirements for the motor carrier transportation of HM, put out by the Research and Special Programs Administration and FMCSA (67 FR 46622, July 16, 2002), NPGA opposed location-tracking systems as a requirement for HM security. Its concerns focused on ease of access to data on CMVs carrying propane and the harm it could cause if the vehicle fell into the wrong hands. Specifically, anyone who wished to cause harm through a coordinated attack could hack the system to learn the whereabouts of any transport vehicle that is loaded with propane. NPGA commented that an outright requirement to install an ELD on these vehicles, particularly for a motor carrier with no demonstrated violations, not only fails to improve safety, but lessens the security of the transport of the fuel.

Knight stated that carriers must be allowed to track vehicle position of the CMVs they own to a proximity closer than 10 miles, even when in personal conveyance. Though the driver may be using the vehicle for personal use, the fleet still has an interest in and responsibility for the vehicle. The commenter wrote that nothing within the rule should impair the ability of the owner of a CMV to track its location, which should not be considered ''harassment.''

ATA believed the needs of carriers to monitor CMV location outweigh the impact on driver privacy. The commenter stated that in the interests of safety, security, and efficiency, motor carriers must be able to monitor their equipment and cargoes.

PeopleNet sought confirmation that GPS precision is only to be limited in the ELD application and that other enterprise solution applications will not be required to reduce GPS accuracy in efforts to support optimization processes and IFTA requirements. Eclipse Software Systems asked for a clarification providing that the system will be allowed to store data in greater position for fleet records (such as highly accurate fuel tax reporting), but that when that data is divulged to law enforcement it will be rounded or truncated to the number of decimal places specified in section 4.3.1.6. The commenter noted that current FMSs store data in far greater detail (often four or more decimal points) for legitimate business purposes.

2. FMCSA Response

FMCSA acknowledges the concern about dispatchers and motor carriers using real-time data in order to require drivers to fully utilize their driving time to the allowed limits. However, FMCSA has not proposed, nor does it include in today's rule, any requirement for ELDs to track CMV drivers in real time. As long as a motor carrier is not compelling a driver to drive while ill or fatigued in violation of § 392.3 or in violation of the HOS limits of part 395, there is no

[25] These measures will be included in the ELD implementation and training protocol currently under development within FMCSA.

violation of the FMCSRs. Authorized safety officials will not have access to information during roadside inspections except the data required by today's final rule that is related to HOS compliance.

The SNPRM proposed limitations concerning the ELD data in order to protect drivers from motor carrier harassment, all of which are reflected in today's rule. The Agency believes that the enhanced security controls and provisions protecting drivers from inappropriate pressures to violate the HOS rules will address many of the concerns raised by drivers concerning ELDs. Although ELDs might be viewed primarily as tools for HOS recordkeeping, the data certainly can be used by motor carriers to document their operations more accurately than they could by using paper RODS.

Further, for systems that include both ELD functionality and real-time tracking and communications capabilities, the device may capture what is transpiring between a driver and a motor carrier or dispatcher. Although this technology is not required under today's rule, such technology also protects drivers from inappropriate pressures to violate the HOS rules.

Today's rule limits the data that may be transferred from an ELD to authorized safety officials. FMCSA, however, did not propose, nor does it include in today's rule, any limitation on a motor carrier's use of technology to track its CMVs at a more precise level than that shared with authorized safety officials, including tracking of CMVs in real time for the purposes of the motor carrier's business. A motor carrier is free to use such data as long as it does not engage in harassment or otherwise violate the FMCSRs. See 49 CFR 390.17.

Given the limited requirements in terms of required location tracking, FMCSA does not agree that the risks suggested by the NPGA outweigh the benefits of ELDs.

Some commenters viewed tracking of vehicles as an invasion of privacy. While a legal basis for their position was not always stated, some of these commenters focused on their Fourth Amendment rights. FMCSA addresses this position under Section XII, M, Legal Issues—Constitutional Rights: Fourth and Fifth Amendments, of this preamble.

E. Mute Function

1. Comments to the 2014 SNPRM

To protect a driver from disrupting communications during rest periods, the SNPRM proposed that, if a driver indicates a sleeper-berth status, an ELD must allow the driver to either mute, turn off, or turn down the volume, or the device must do so automatically. This requirement would only apply to FMSs or other technology that includes an ELD function and that includes a communications function. Given drivers' concerns about interrupted rest periods, this is the single area in which the Agency believed it necessary to address an issue that extends beyond the provisions of a minimally-compliant ELD. However, this protection does not apply if a team driver is logged onto the ELD as on-duty, driving.

Numerous commenters complained of repeated contact by dispatchers, even during breaks and sleeper-berth time. One commenter wrote that the mute function should be the decision of the driver rather than automatic. She stated that not all companies abuse their drivers as the enforced automatic mute implies.

The IME stated that it did not oppose ELD features that allow a driver to mute, reduce volume, or turn off a device during sleeper berth status. Eclipse Software Systems stated that the audible alarm required by section 4.1.5 of the appendix is very important and should not be muted if the vehicle is moving. Eclipse recommended that the rule be amended to say the mute function does not apply when the engine is running and the vehicle is in motion.

2. FMCSA Response

The complaint from drivers about being contacted during sleeper berth time was a common one and FMCSA responds to that concern by requiring in section 4.7.1 of the technical specifications of today's rule, that the mute function either be engaged automatically when the driver enters sleeper berth status or that it allows the driver to manually select that function. (However, this function would not be available if a co-driver was logged in as on-duty, driving.) In the event the CMV started moving, the ELD would default to on-duty, driving status, thereby overriding the mute function. FMCSA believes this addition of a mute function is important to allow drivers to obtain adequate rest during sleeper berth or off-duty periods.

F. Drivers' Access to Own Records

1. Comments to the 2014 SNPRM

The SNPRM provided that a driver has a right to access the driver's ELD data during the period a carrier must keep these records. During the period that the data is accessible through the ELD, a driver must have a right to the records without requesting access from the motor carrier.

The IME agreed that drivers should have access to their ELD data, including options for a motor carrier to provide the data to drivers upon request. The IBT also supported giving drivers the ability to obtain copies of their own ELD records available on or through an ELD. IBT believed that it is critical that drivers or driver representatives have, upon request, immediate access to, and copies of driver ELD records for the 6 months that the motor carrier is required to retain the records.

XRS, Verigo, and Zonar noted that obtaining the logs from the ELD will limit drivers' access to 7 days. Commenters wrote that drivers require records for numerous reasons, including comparing logs to settlement records, providing records required for tax purposes, providing evidence in loss prevention claims, and qualification for safety awards. It may be necessary for a driver to have access to more than 12 months of records. Commenters believed that access to driver's records is best achieved as a function of the carriers' support system most carriers already have in place rather than as a function of the ELD. XRS asked whether there could be an alternative method, such as a Web-based login, to retrieve the required information. It recommended that, when a driver leaves a carrier, the RODS be supplied on a jump drive in a PDF format to keep costs at a minimum and not cause a security risk by giving access to individuals who no longer have a relationship with the carrier. The commenter questioned what amount of data may be requested by drivers if they have been employed by the carrier for at least 6 months. Extracting 6 months of data through the ELD would be costly.

Verigo stated that the electronic or printout format of the driver's records must be compliant with section 4.8.2.1, which is the comma separated values (CSV) file output format for peer-to-peer record exchange. The format will be of no value to the driver. The commenter believed that records retrievable by the driver should be a PDF copy of the standard paper format in use today because graph-grid logs can be read, understood, printed, distributed, and checked with ease by the driver without a requirement to provide a utility function for the driver to display the data. The commenter recommended the requirement to access records from ELDs connected to backend servers be eliminated and that records be retrieved from support systems connected to the ELD.

2. FMCSA Response

FMCSA acknowledges that a driver's ability to access his or her records through an ELD without requesting them from the carrier will vary depending on the ELD system employed. In some cases, immediate access is limited to the 7 previous days. Thus, we did not prescribe an exact time during which a driver could independently access the records. If the driver cannot independently access the records, the motor carrier must provide a means of access on request. However, the right of access is limited to a 6-month period, consistent with the time period during which a motor carrier must retain drivers' RODS.

The SNPRM proposed a single data format that applies to all the data elements and the file format. This is adopted in today's rule. The ELD data file output will not vary dependent on the ELD used. The data output is a comma delimited file that can be easily imported into Microsoft Excel, Word, notepad, or other common tools that a driver may access. A driver will also be able to access her or his ELD records through either the screen display or a printout, depending on the design of the ELD.

G. Drivers' Control Over RODS

1. Comments to the 2014 SNPRM

Recognizing that ELD data reflect a driver's data, the proposal required that any edits made by a motor carrier would require the driver's approval. FMCSA's proposal was intended to protect the integrity of a driver's records and prevent harassment attributable to unilateral changes by motor carriers.

In the SNPRM, FMCSA used the word ''edit'' to mean a change to an ELD record that does not overwrite the original record. A driver may edit and the motor carrier may request edits to electronic RODS. Drivers have a full range of edit abilities and rights over their own records (except as limited by the rule), while a carrier may propose edits for a driver's approval or rejection. All edits, whether made by a driver or the motor carrier, need to be annotated to document the reason for the change.

Saucon Technologies asked about drivers editing their logs using a support system other than the recording device: Specifically, what drivers are permitted to change versus what safety administrators are allowed to change. The commenter wrote that the safety administrator should be advised when drivers make corrections to their logs and have the opportunity to approve the change. XRS stated that FMCSA needs to allow a process for the driver to accept edits and certify the logs on the ELD prior to transfer to enforcement to be consistent with § 395.30.

A number of commenters, including the Alliance for Driver Safety & Security, Knight, and J.B. Hunt, stated that employers should not be held responsible if a driver makes a false or inaccurate entry onto an ELD and refuses to change the entry when the employer requests it be done. Knight asked whether a carrier can force a driver to make an edit when it is clear the driver failed to log something properly. Knight wrote that, though the carrier is attempting to get the driver to comply with the rules, the driver may be able circumvent compliance and make a false allegation that the carrier is ''coercing'' him or her. Knight believed that FMCSA ought to allow carriers to make edits and allow the driver to either approve or not approve them when made by the carrier.

Knight commented that the rule should clearly allow drivers to edit their ELD records at any time before, during, or after having confirmed a record. Knight wrote that FMCSA should allow drivers to flag personal conveyance or yard moves segments even after they occur. Knight believed the most common error made with ELDs is that drivers forget to change duty status. Therefore, FMCSA should allow drivers to make duty status change designations as edits at any time. Such an allowance will better serve drivers and alleviate concerns about an ELD intruding upon an individual's privacy.

TCA wrote that employers should be allowed to make minor edits to correct driver ELD records, limited to instances that do not pertain to compliance with driving or on-duty time.

ATA stated that the proposed rule on edits will complicate compliance and enforcement, and could raise the potential for fraud. ATA identified several problems it perceived as the result of requiring driver acceptance of edits. The commenter wrote that FMCSA must consider what an employer should do if a driver refuses to accept the changes. Similarly, ATA asked what happens if the erroneous record is identified during an internal review weeks or months after the fact and the driver cannot be contacted for approval because he has since left the company? For these reasons, and because the carrier is ultimately responsible for maintaining accurate records, ATA stated that FMCSA should permit carriers to make edits. At a minimum, the Agency should allow changes that would not disguise driving time violations or otherwise make such violations possible. ATA indicated that minor recordkeeping errors that do not reflect driving time violations comprise the vast majority of HOS violations. ATA recommended that FMCSA allow carriers to correct them, unhindered by the need to seek driver approval, would more efficiently help both carriers and authorized safety officials focus on those comparatively few discrepancies that reflect material fraud (*i.e.,* false logs) and driving time violations.

J.B. Hunt wrote that the final rule should clearly say that corrective action taken by a carrier against a driver for false entries is not harassment.

BigRoad Inc. (BigRoad) stated that, although section 4.3.2.8.2 (2) allows for the correction of errors related to team driver switching, it does not allow for the correction of errors commonly found in slip-seat operations, where drivers do not always drive the same truck each day. In such operations, drivers occasionally forget to sign out when their shift in the truck ends or forget to sign in when their shift begins. This can cause drive time to be incorrectly assigned to the driver who was last signed in instead of the current driver of the truck, essentially the same type of error experienced by team drivers who are signed-in incorrectly. ABA stated that there was some confusion with respect to the SNPRM requirement that only drivers are able to ''edit'' their HOS records. While ABA agreed that drivers should have the ability to revise a duty status designation, it asked whether the SNPRM meant to allow drivers to revise records that do not reflect a change in duty status. ABA contended that the driver should be allowed to revise only the duty status designation and that the final rule should reflect that determination.

Schneider National supported the proposal that the driver must approve edits made by the motor carrier to ensure accuracy. However, since any edit made on a record from more than the preceding 8 days will not impact the current duty cycle, the requirement for driver approval should be removed. Schneider listed several operational reasons why an edit would be made on a record that is more than 8 days old.

Roehl Transport stated that the proposed process will complicate compliance and enforcement. Allowing the company to edit a driver's ELD record would, they argued, facilitate its ability to correct a potential falsification. Roehl Transport wrote that the motor carrier is ultimately responsible for maintaining accurate RODS and FMCSA should permit motor carriers to make edits to drivers' RODS.

Verigo commented that the proposal to allow editing of ODND records does

not indicate any time limit, or address edits that trigger a violation on subsequent records that have already been certified. Verigo believed that the proposal indicated that, when edits, additions, or annotations are necessary, the driver must use the ELD. Commenter believed the rule should allow editing and recertification of records outside of the ELD provided all other proposed protocols are followed.

The IBT supported allowing a driver to edit, enter missing information, or annotate their ELD record when the vehicle is stopped. It was concerned with the motor carrier's ability to propose changes directly to the driver's record within the electronic interface because it would create an opportunity for driver coercion and harassment. It supported the inclusion of edit notes as detailed in the appendix to subpart B of part 395, section 4: Functional requirements. The IBT proposed that, if a driver record is changed, the source of the change be documented.

The IME indicated that any change of a driver's records made by a motor carrier should require the driver's approval.

The OTA stated that some provision needs to be made to allow the carrier to correct RODS without the driver's approval. Given the high turnover in the industry, it is common for a driver to have moved to another carrier and no longer be responsive to the carrier attempting to correct the record. Commenter wrote that even a clear, obvious error could remain unchanged if the driver simply refuses to respond to the carrier's request, resulting in a false log charge against the company.

Although PeopleNet thought that carriers are better suited to provide comments concerning the handling of ''unassigned driver events'' and making corrections to ELD records, it recommended that the final rule provide some additional guidance on how to manage carrier-initiated corrections that the driver opts to reject. Zonar recommended adding a section addressing the certification of records for law enforcement. Commenter believed that the driver should be required to certify the records prior to giving them to law enforcement. In addition, law enforcement should allow the driver sufficient time to certify his or her ELD records before a citation is given for not having them available.

2. FMCSA Response

While FMCSA appreciates carrier management concerns about requiring driver re-certification of any edits made subsequent to the driver's initial certification, today's rule retains this concept. The ELD reflects the driver's RODS, although integrity of the records is both a driver and carrier responsibility. The driver certification is intended, in part, to protect drivers from unilateral changes—a factor that drivers identified as contributing to harassment. In fact, the rule prohibits a carrier from coercing a driver into making a false certification. See § 395.30(e) of today's rule.

Edits are permitted of a driver's electronic record except as limited by the rule's technical specifications. See 4.3.2.8.2 of the technical specifications. Each edit must be accompanied by an annotation. See § 395.30(b)(2) of today's rule. However, if the driver was unavailable or unwilling to recertify the record, the proposed edit and annotation made by a carrier would remain as part of the record. The Agency would expect that a carrier and driver would ordinarily resolve any disputes in this regard. Changes initiated after the period during which records were accessible through the ELD (*i.e.,* minimum of 8 days) would likely be initiated by a carrier; however, driver re-certification would still be required. See § 395.30(b)(4) of today's rule. FMCSA recognizes that the need for edits will sometimes arise at a time when the driver's record will no longer be accessible through the ELD. The process to edit records at this point will vary depending on the ELD system used. However, any edit and annotation will still require recertification of that record by the driver.

Today's rule does not specifically address the ''slip-seat'' scenario raised by BigRoad. However, FMCSA expects the motor carrier to resolve the issue by proposing edits that would adequately attribute the driving time and provide an annotation describing the circumstances. In terms of roadside inspections, the rule would not modify current practice where a driver normally certifies her or his record at the close of the day. See § 395.30(b)(2) of today's rule.

H. Harassment Complaints

1. Comments to the 2014 SNPRM

In the SNPRM, FMCSA proposed a new complaint process under which a driver who felt that she or he was subject to harassment, as defined in the SNPRM, could file a complaint with the FMCSA Division Administrator for the State where the incident is occurring or had occurred. Provided the complaint was not deemed frivolous, an investigation would result. FMCSA's finding of a harassment violation could result in a notice of violation under 49 CFR 386.11(b) or a notice of claim under 49 CFR 386.11(c).

OOIDA noted that proposed § 390.36 requires that harassment complaints be based upon violations of § 392.3 or part 395. It wrote that the statutory provision on harassment is not so limited and the SNPRM does not explain or defend this limitation. In its view, the approach of tying harassment problems to driver violations of part 395 or § 392.3 is flawed. Requiring that driver harassment complaints be based upon regulatory violations creates a giant loophole through which acts of harassment will pass with impunity. It also stated that FMCSA has assigned itself a passive role with no duty to investigate or take any action on its own and criticized the Agency's reference to alternative remedies. Although OOIDA noted that the reference to ''productivity'' was eliminated in MAP–21, it nevertheless criticized the Agency's failure to follow the Seventh Circuit's direction that the Agency define how ELDs may be used to monitor driver productivity. It also argued that the statutory requirement to address harassment under 49 U.S.C. 31137(a)(2) applies to any electronic logging device and is distinct from the ELD mandate under section 31137(a)(2). OOIDA further suggested that the Agency defined ELD in a manner so as to minimize the requirement that the Agency ensure that ELDs do not result in harassment.

ABA stated that § 386.12, regarding complaints of substantial violations, requires that a complaint against a carrier for a ''violation may be filed with the FMCSA Division Administrator for the State where the incident . . . occurred.'' It questioned whether the complaint may be transferred to the FMCSA Division Administrator for the State where the motor carrier is domiciled. For the small business bus operator, ABA commented that the costs associated with defending any complaint can be substantial. The defense would be significantly more costly if the carrier is required to hire an out-of-State attorney and bear the costs of the proceeding in a State that could be thousands of miles away from home.

2. FMCSA Response

In mandating the use of ELDs for CMV drivers required to keep RODS, Congress embraced ELDs as a tool to enhance compliance with the HOS rules. The statute restricts FMCSA's use of ELD-generated data for purposes unrelated to motor carrier safety enforcement. Thus, in today's rule the Agency tied the definition of ''harassment'' to violations of the HOS

rules set forth in part 395 and a related regulation, § 392.3, prohibiting carriers from requiring drivers to drive when their ability or alertness is impaired due to fatigue, illness or other causes that compromise safety.

FMCSA believes the effective enforcement of the harassment prohibition requires that harassment be defined by objective criteria. Linking the definition of harassment to underlying violations of specified FMCSRs will enhance the Agency's ability, through its Division Administrators located throughout the country, to respond to driver harassment complaints filed under § 390.36(c) in a consistent manner and within a reasonable period of time. However, the Agency simply lacks the resources necessary to investigate every possible circumstance that a driver might consider as harassment.

OOIDA's suggestion that the Agency defined the term ''ELD'' to include only recording functions in order to minimize its obligation to address harassment is without merit. The Agency's requirements for an ELD of limited functionality, which are consistent with MAP–21's definition, were developed in order to minimize the cost of required technology. Furthermore, today's rule addresses ELD-related functionality, other than recording, to require that ELDs have a mute function available during sleeper berth periods. This technical specification was adopted directly in response to concerns raised by commenters.

In addition, FMCSA notes that § 390.36 is not the sole remedy available to drivers who believe they have been subjected to harassment. Drivers may alternatively seek relief by filing a coercion complaints with FMCSA under § 386.12(c), a process adopted in the recent coercion rulemaking (80 FR 74695, November 30, 2015), or by filing complaints with the Department of Labor pursuant to 49 U.S.C. 31105, depending on the underlying facts. The Agency notes that certain examples of harassment offered by commenters fall squarely within the realm of labor-management relations rather than the application of the HOS rules and are therefore outside the scope of this rulemaking.

The Agency does not address the distinction between productivity and harassment, because, as part of the MAP–21 legislation, Congress eliminated the statutory provision expressly permitting carriers to use ELDs to monitor the productivity of drivers. In light of that revision, we do not infer congressional intent that the Agency establish guidelines in this rule for the appropriate use of ELDs to improve productivity. FMCSA simply makes clear that, for the protection of drivers, productivity measures undertaken by carriers cannot be used to harass drivers, as that term is defined in the regulations.

The procedures governing the filing of a complaint, including with whom the complaint must be filed, and the procedures addressing the Agency's handling of a harassment complaint have been modified from those proposed in the SNPRM in order to track the procedures governing complaints alleging coercion in a recent FMCSA rulemaking (80 FR 74695, November 30, 2015). Similarly, the complaint process for substantial violations is modified to track, in part, procedures under the coercion rule. Complaints alleging a substantial violation can be filed by any person through the National Consumer Complaint Database or with any FMCSA Division Administrator; the Agency will then refer the complaint to the Division Administrator it believes is best able to handle the complaint.

As further indication of the seriousness with which FMCSA's viewed drivers' harassment concerns, the Agency conducted a survey of drivers and motor carriers concerning their attitudes and experiences related to harassment and its relationship to ELDs. FMCSA placed the harassment survey report in the public docket with a request for comment, to which OOIDA subsequently responded. The survey and related comments, which are part of the record of this rulemaking, are discussed in Section XII, L, of this preamble.

I. Matters Outside FMCSA's Authority

Several commenters submitted recommendations that would require new statutory authorities for FMCSA before action could be taken to address the issue. For example, commenters suggested changes in methods by which drivers are paid, admissibility of ELD data in litigation, and further protections of ELD data beyond current law. The Agency will not consider taking actions beyond its current authority and will not commit to seeking such authority.

X. Discussion of Comments Related to the Technical Specifications

A. Performance and Design Specifications

The detailed performance and design requirements for ELDs included in today's rule ensure that providers are able to develop compliant devices and systems, and that motor carriers are able to make informed decisions before purchasing them. The requirements ensure that drivers have effective recordkeeping systems, which provide them control over access to their records. The technical specifications also address, in part, statutory requirements pertaining to prevention of harassment, protection of driver privacy, compliance certification procedures, and resistance to tampering. Furthermore, they establish methods for providing authorized safety officials with drivers' ELD data when required.

1. Comments to the 2011 NPRM

The 2011 NPRM relied entirely upon the now-vacated 2010 rule. Though comments were submitted to the 2011 NPRM concerning the technical specifications, they were out of the scope of the 2011 proposal, as those specifications had already been finalized in the April 2010 rule and subsequent amendments to address petitions for reconsideration of the rule.

2. Comments to the 2014 SNPRM

FMCSA proposed new technical specifications in the SNPRM, which included detailed design and performance standards for ELDs that address statutory requirements. FMCSA proposed specific standard data formats and outputs that ELD providers would need to use to transfer, initialize, or upload data between systems or to authorized safety officials. These proposed technical specifications are intended to be performance-based, in order to accommodate evolving technology and standards, and to afford ELD providers the flexibility to offer compliant products that meet the needs of both drivers and motor carriers. In the SNPRM, FMCSA asked the following questions specifically about interoperability.

1. Should FMCSA require that every ELD have the capability to import data produced by other makes and brands of ELDs?

2. To what extent would these additional required capabilities for full interoperability increase the cost of the ELDs and the support systems?

3. While full interoperability could lower the cost of switching between ELDs for some motor carriers, are there a large number of motor carriers who operate or plan to operate with ELDs from more than one vendor? How would full interoperability compare to the proposed level of standardized output? If carriers wanted to operate ELDs from more than one vendor, would this be a barrier? Would this issue be impacted

by the market-share of the ELD manufacturer?

4. Would motor carriers and individual drivers have broad-based use or need for such capability? Is there a better way to structure standardized output to lower cost or encourage flexibility without requiring full interoperability?

Providers raised questions about many of the technical specifications and suggested changes. NTSB asked FMCSA to consider adding crash survivability for ELD and ELD data.

EROAD Inc. (EROAD) stated that the easiest and fairest way for FMCSA to provide standards that guarantee high performance is to use general hardware and software technical and security standards. It recommended a requirement for ELD providers to meet appropriate FIPS, Common Criteria, or other equivalent standards.

BigRoad stated that codifying the technical specifications, as part of the regulatory requirements, is undesirable because the regulatory process would impede the development of the technical specifications. Instead, FMCSA should remove technical specifications from the regulatory requirements and create a technical standards open working group consisting of industry and government representatives that is able to work collaboratively through the interoperability issues. BigRoad was concerned that the complexity of the ELD specifications, particularly in support of roadside inspection information transfer, would result in ELD systems that are more expensive and less reliable than necessary to meet the requirements of MAP–21. Interoperability issues between ELD providers and roadside inspection systems could result in an unintended bias toward drivers producing printed paper logs during an inspection. Providing simpler roadside data transfer options, with specific requirements for both ELD providers and authorized safety officials, would allow technology providers to deploy the necessary systems more quickly.

Continental stated that the ELD regulation and associated standards should include a clear security specification, using standard IT industry processes and endorsed by the National Institute of Standards and Technology (NIST) and standardized interfaces. This would assist with the identification of drivers, the transmission of drivers' data from one vehicle to another and easy access to and downloading of data by enforcement personnel and vehicle operators.

PeopleNet requested clarification on how to manage data for those drivers that transition between a compliant AOBRD device and a compliant ELD. Eclipse Software Systems stated that it would be useful for any driver to have access to non-authenticated driving time so they are aware of it, since it will be displayed to roadside inspectors. It asked for a clarification that displaying co-driver names (perhaps automatically from other driver's data on the ELD) is allowed.

3. FMCSA Response

The Agency is not requiring crash survivability standards for ELDs because of the costs involved. Crash survivability is a complicated and expensive requirement, and would mean that the ELD has to withstand high impact or crash forces and be water resistant and withstand exposure to open flames for some period of time. FMCSA does not believe this is necessary.

FMCSA agrees that some level of standardization is necessary. Whenever possible, FMCSA used NIST, or other commonly available technical standards, including those incorporated by reference in today's rule in § 395.38, Incorporation by Reference.

FMCSA has elected to codify the technical specification standards in the appendix to part 395 in today's rule rather than establish a new working group. Though FMCSA acknowledges that including the technical requirements in the regulations makes changing them more difficult, FMCSA believes this is the best way to provide transparency and ensure that all interested parties are aware of the requirements and any proposed changes to the standards. FMCSA notes that adopting technical specifications by regulation is the only way to make them binding. Additionally, though the Agency did not create a workgroup, the MCSAC subcommittee, which included members from the ELD technical community, gave a recommendation to FMCSA on task 11–04, which the Agency considered in lieu of a workgroup's recommendations.

Today's rule requires standardized output and standardized data sets. FMCSA has decided not to require full interoperability between all ELDs. Although full interoperability would have some benefits, it would also be complicated and costly. FMCSA believes that requiring standardized data output and requiring that drivers have access to their own records will achieve some of the goals of the commenters advocating for full interoperability.

The motor carrier and the driver are responsible for ensuring that all the RODS information required by the HOS rules is available for review by authorized safety officials at the roadside. If the driver works for multiple employers with multiple ELD or AOBRD systems that are not compatible (*e.g.,* the data file from one system cannot be uploaded into the other system), the driver must either manually enter the missing duty status information or provide a printout from the other system so that an accurate accounting of the duty status for the current and previous 7 days is available for authorized safety officials.

B. Specific Performance Requirements

1. Comments to the SNPRM

Commenters had comments or questions on specific design elements in the proposed appendix to part 395.

Comments Requesting New Requirements

FedEx stated that ELDs should be programmed to acknowledge that a driver is using the 100-air-mile exception. While taking the exception, the driver should only need to enter start time and end time into the ELD. Omnitracs, LLC (Omnitracs) asked for a definition of minimum duty status duration. Paper logs are to a granularity of 15 minutes, but there is no specification for RODS recorded by the ELD. Omnitracs believed the customer should be able to configure the duration.

CVSA and the United Motorcoach Association (UMA) stated that the ELD should alert a driver when he or she is approaching the HOS limits.

Number of Required Features

The IFDA recommended eliminating the requirement for a single-step interface and graphic display or printout. The commenter wrote that there is not a sufficient safety benefit to justify the 60-minute requirement for recording the location, communications methods, and indications of sensor failure, which it wrote are not currently standard technology.

XRS stated that FMCSA needs to clarify why the engine hours are a requirement. FMCSA should identify what other methods would accurately acquire engine hours without an ECM available.

ATA raised concerns about the requirement to synchronize devices to Coordinated Universal Time (UCT) periodically and to ensure that a device's deviation from UCT not exceed 10 minutes at any point in time. To ensure such synchronization will

require cell or satellite service (depending on the device) and such service is not always available. ATA also questioned if ELDs would be able to produce the volume of data that FMCSA proposes (*e.g.,* last 6 months' records, all drivers who previously used the device). ATA believed that such requirements will cause devices to need large memory capacity that will add to cost, reduce design flexibility, and ultimately impact the ability of some existing hardware to be upgraded to meet new specifications. ATA recommended limiting the requirement to the same level of detail that drivers currently must provide during roadside inspections.

With the requirement for ELD records to resolve latitude and longitude to a place name, as well as the distance and direction to the place name, Verigo stated that it is questionable why locations need to be resolved to an accuracy of two decimal places. This level of granularity does not appear to provide a higher level of safety and is inconsistent with the accuracy in use today. The 10-mile accuracy of single decimal coordinates is consistent with the distance that could reasonably be traveled within the 15-minute interval in use.

Eclipse Software Systems stated that the transaction numbering system, along with the odometer capture (vehicle miles) provides very strong security that makes tampering extremely difficult. Adding engine hours, ignition on/off and VIN detection add very little additional security. Another issue Eclipse asked FMCSA to consider is that the serial and CAN buses of ECMs broadcast the odometer and wheel speed without intervention from an ELD. The ELD can sit in ''listen mode'' and obtain this information. Conversely, to get engine hours and VIN, the ELD must transmit on the ECM bus, and send requests for this information. Eclipse commented that it was aware of some EOBRs improperly transmitting on vehicle buses, causing erratic behavior on the electrical bus. Given that an ELD mandate is likely to draw lots of new providers to this market (who may be inexperienced with ECM interfacing), it seems safer that ELD providers operate in ''listen only'' mode, where they are less likely to interfere with vehicle operation by broadcasting on the engine bus.

2. FMCSA Response

FMCSA is aware that there is no current device on the market that meets every standard in today's rule. However, the intent of this rule is to set a standard that the Agency believes is secure, useful, and can be met at a reasonable cost. FMCSA has been careful to consider the cost of developing new components of an ELD, and has purposefully set standards that can be met by re-programming many existing devices with little cost to the providers.

Requesting New Requirements

FMCSA does not require ELDs to accommodate any statuses other than those that are currently required to complete paper RODS, including excepted and exempted statuses. However, section 4.3.3.1.2. (c) states that an exemption must be proactively configured for an applicable driver account by the motor carrier. The ELD must prompt the motor carrier to annotate the record and provide an explanation for the configuration of the exemption.

FMCSA does not require a minimum duty status duration. The ELD will capture all duty statuses entered; there is no minimum amount of time these statuses must be engaged. While longstanding industry and enforcement practices may have relied upon minimum intervals of 15 minutes in the handwritten RODS, the ELD provides for a more accurate accounting of drivers' time. This should not be construed to be an indicator that the activities that are electronically recorded as less than 15 minutes are suspect, only that the time actually required to complete the task may be less that what had been traditionally noted in the paper RODS.

FMCSA allows, but does not require, any notification of the driver when they are nearing their HOS limits. While an ELD will automatically record on-duty driving time, a driver is still responsible to record other duty statuses based on the driver's actual work time.

Number of Required Features

FMCSA agrees that data transmission is complex, and roadside enforcement and review will likely play a large role, especially in the transition phase of the implementation of today's rule. For this reason, FMCSA has standardized the information on the printout and the display screen to contain the same data set. FMCSA believes that the modifications made from the SNPRM in today's rule to require a standardized backup of a display or printout will increase the ease of users.

FMCSA acknowledges the commenter's concerns about 60-minute location but the Agency believes ELD devices can easily be programmed to record at 60 minute intervals.

FMCSA believes it is necessary to record engine hours, as a check with the other data contained on the ELD. A record of engine hours, when compared with the ECM odometer readings, verifies the accuracy of periods other than drive time. Because today's rule is not applicable to vehicles older than model year 2000, and ELD providers can work-around vehicles using OBD–II, which might not capture engine hours, the concern about engines without ECMs should be eliminated. However, should a driver of a CMV with a non-ECM engine wish to install an ELD, Appendix B sections 4.2(b) and 4.3.1.2(b) provide specifications for an ELD when there is no ECM or ECM connectivity.

With current technology, it should be rare for an ELD's time to drift more than 10 minutes. In addition, the technical specifications require the ELD to (1) periodically cross-check its compliance with the requirement specified in section 4.3.1.5 of the Appendix with respect to an accurate external UTC source and (2) record a timing compliance malfunction when it can no longer meet the underlying compliance requirement.

FMCSA clarifies that the ELD in the CMV only needs to retain the data for the current 24 hour period and the previous 7 consecutive days. Carrier (or private driver) record keeping systems could retain more data for the purposes of historical data storage. FMCSA does not prohibit any ELD from retaining more data than 8 days, but it is not required. The carrier is required to keep data for 6 months in case of an FMCSA inspection. This information can be kept on the device itself or in the carrier's office. These electronic files are not large. FMCSA estimates that 6 months of data, for one ELD, would not require more than 10 MB of storage. Therefore, in this rule, FMCSA does not reduce the data set that needs to be retained.

FMCSA needs to capture latitude and longitude because it is more reliable for computers to process than place names. However, FMCSA also needs place names to allow drivers to verify that the location is correct and safety officials to recognize the location quickly. Data collected in addition to odometer, such as engine hours, are necessary as a cross check to verify that data has not been manipulated. Location resolved to an accuracy of two decimal places when drivers are on-duty driving provides a clear history of where the driver and vehicle have been. In today's rule, FMCSA does not require an ELD to be able to communicate with the motor carrier. FMCSA disagrees that the location information does not have a safety reason; location information will make falsification of HOS records more

difficult. Additionally, FMCSA believes this level of specificity can provide accurate time information, and that this is not a difficult level of location information to meet.

In response to concerns about improper transmittal, the industry will be driven by customer requirements to provide safe and non-interfering connectivity of the ELDs to the engine ECM or ECM connectivity. Additionally, the use of industry standards in the regulation, and the requirement that ELD providers register and certify their ELDs on FMCSA's Web site, should reduce the potential for this type of issue.

C. Security

1. Comments to the 2014 SNPRM

The SNPRM proposed incorporating by reference several industry standards for privacy and encryption including NIST standards.

Continental stated that ELDs should be tested and certified to comply with security standards by independent laboratories that follow processes endorsed by NIST. In the absence of a precise requirement for a specific tamper resistance level, FMCSA should at least ensure that ELD software cannot be accessed and modified by end users. As drafted, Continental stated the rule may lead to the proliferation of hacked or cloned apps for smartphones and tablets that exactly mimic the displays of compliant systems. As a minimum security requirement, FMCSA should only allow ELDs that prohibit user access to the software environment on the device. The provider of the ELD should demonstrate during the certification process that the software environment on the device cannot be easily accessed and modified by the end user. While the industry has shown an interest in using smart devices for operational management, the current market penetration of smart device-based ELDs is very low. Therefore, there will be only a minimal financial impact to the industry by prohibiting open-software devices. As the number and sophistication of tampering attempts will grow with time, the overall tamper resistance level could be significantly enhanced by requiring that the data delivered by ELDs be digitally signed. Continental noted that FMCSA proposes to require that ELDs provide data in the format of an electronic file. Lacking enforceable security requirements, however, it will be extremely easy to perform undetectable modifications on those files.

XRS stated that many suppliers of AOBRD portable devices or handheld devices that are AOBRD compliant and moving to an ELD have been employing security measures through the use of Mobile Device Management software, which provides for security of the device.

BigRoad stated that the series of checksums that are required on event logs, output file lines, and the entire output file itself are calculated in a manner that would be trivial to recalculate should any data be altered. However, in proposed sections 7.1.20, 7.1.26, and 7.1.31 (7.21, 7.27, and 7.32 in this rule), these values have the stated purpose to identify cases where an ELD file or event record may have been inappropriately modified after its original creation. BigRoad stated that, for security against purposeful tampering, only a cryptographically robust signature of the data in question is effective in practice.

Omnitracs also questioned the value of these and stated that as proposed they provide no security. PeopleNet recommended the use of a proven industry standard, MD5 Hash.

2. FMCSA Response

FMCSA follows all DOT Security guidelines which includes NIST standards for access to any FMCSA system or network. In this rule, FMCSA has expressly prohibited any modification at the user level. FMCSA believes that the security standards of ELDs have appropriately balanced industry standards, privacy, the need for accurate HOS monitoring, and the cost of security measures. FMCSA notes that it has only established minimally compliant standards in this rule, and there could be a market for more security features on an ELD. ELD providers are not prohibited from using additional security measures, so long as the data can still be transferred to authorized safety officials as required by the today's rule.

In addition, the commenter's concern about mobile devices is misplaced. Security on mobile devices is well-understood. Banks, governments, and retailers all provide apps which require security. There is no reason to believe that consumer mobile devices cannot be an adequate platform for ELDs. FMCSA believes the specifications and privacy standards and protocols are sufficient to respond to reasonable concerns about hackers.

FMCSA does not prohibit the use of Mobile Device Management software, but believes it is too costly to include as a minimum ELD specification.

The intent of the checksums is to provide a simple method of detecting data manipulation to help prevent a novice user or rogue script programmer from easily modifying the data and gaming the system. The checksum algorithms are sufficiently robust to prevent a novice user from simple data manipulation. Although MD5 is a well-known and more robust checksum algorithm, in this instance it is no better than the simple scheme provided in this rule. Someone changing the data could simply apply the MD5 checksum to each line as there is no independent source to verify its accuracy. The MD5 checksum has the additional disadvantage of adding significantly more data to each line, thus increasing the size of the overall file.

D. External Operating Factors and Failure Rate of ELDs

1. Comments to the 2014 SNPRM

The SNPRM did not address the effect of external operating factors, such as dirt or vibration, on the failure rate of ELDs.

The National Ground Water Association stated that FMCSA should ensure that providers understood that ELDs had to perform when subjected to vibration from heavy equipment. The Association of General Contractors stated that the off-road conditions construction vehicles operate under may be problematic for ELDs. Its members indicate at least a 10 percent failure rate.

2. FMCSA Response

In today's rule, FMCSA continues to allow the marketplace to address developing roadworthy ELDs. As with other electronic device manufacturers (mobile phones and laptop computers for example), the market should drive ELD providers to respond to CMV operating situations where a high level of durability is required. CMVs that operate only on the highway may not need the robustness of design that the construction and utility industries require.

E. Automatic Duty Status

1. Comments to the 2014 SNPRM

If the driver's duty status is Driving, an ELD would only have allowed the driver who is operating the CMV to change the driver's duty status to another duty status. A stopped vehicle would have to maintain zero (0) miles per hour speed to be considered stationary for purposes of information entry into an ELD. Additionally, an ELD would have to switch to driving mode automatically once the vehicle is moving at up to a set speed threshold of 5 miles per hour.

XRS stated that FMCSA should indicate whether the drive time should be set back to the beginning of the on duty period when 5 minutes has expired. Zonar stated that the safety, effectiveness, efficiency, and reliability of the ELD and FMS will be significantly limited by not allowing automatic duty-status changes when the system finds specific criteria for an event have been met. Zonar commented that automatic changes include providing the driver the ability to change the event; if the driver does not respond, then the automatic duty status occurs. Automatic duty status records must include an annotation to describe the system action taken, so the original record is retained.

XRS stated that FMCSA should reconsider ''Other Automatic Duty-Status Setting Actions Prohibited'' since the driver will have the ability to edit and annotate other changes. Section 395.2 (definition of ''on-duty time'') allows a co-driver to be off duty for up to 2 hours in the passenger seat of a moving vehicle before or after at least 8 hours in the sleeper berth and then the co-driver must revert to on duty. Allowing an automatic duty status change from off to on duty when the 2 hours expires, would make ELD records more accurate and avoid additional transactions by the driver without compromising safety.

2. FMCSA Response

FMCSA purposefully did not require drive time to set back automatically. FMCSA believes that the driver of a CMV has a responsibility to ensure the accuracy of his or her own HOS records. FMCSA considers that, in most cases, status changes should be directly linked to an action taken by a driver.

An ELD must prompt the driver to input information into the ELD only when the CMV is stationary and the driver's duty status is not on-duty driving, except for the automatic setting of duty status to ODND. The driver still has the option to edit and switch that time after it has elapsed, as long as it is not driving time. Limited editing rights, coupled with the ability of the driver and motor carrier to annotate, should ensure that records are accurate. FMCSA does not believe this will result in an unreasonable number of edits or complicated data for enforcement.

F. CMV Position

1. Comments to the 2014 SNPRM

The SNPRM provided that an ELD must have the capability to automatically determine the position of the CMV in standard latitude/longitude (proposed section 4.3.1.6. of the SNPRM). The ELD must obtain and record this information without any external input or interference from a motor carrier, driver, or any other person. CMV position measurement must be accurate to ±0.5 mile of absolute position of the CMV when an ELD measures a valid latitude/longitude coordinate value.

FMCSA proposed that position information be obtained in or converted into standard signed latitude and longitude values and must be expressed as decimal degrees to hundreds of a degree precision (*i.e.,* a decimal point and two decimal places).

XRS stated that FMCSA needs to clarify the accuracy of the GPS as to rounding up or truncating on the 1-decimal and 2-decimal accuracy. Eclipse Software Systems stated that FMCSA is requiring that the ELD determine date, time, and location ''[w]ithout allowing external input or interference.'' Given that this data comes from GPS, and GPS can be interfered with (by obscuring the GPS antenna, for example), the wording should be changed to reflect that the carrier, driver, or other individuals are not allowed to set the date, time, and location manually. Eclipse commented that other parts of the SNPRM already make it clear that interfering with GPS is a violation, but the responsibility lies with the individual, not the ELD provider.

Zonar asked for guidance on the maximum characteristics to be displayed. A customer may choose to have more precise information than 3 to 6 or 3 to 7 characters. As an FMS has reports and tools that are supported by the precise GPS location of the vehicle, this will have a major impact on the system.

2. FMCSA Response

Geo-location rounding to a 1-decimal (approximately within a 10 mile radius) will provide sufficient granularity to the data without providing an excessive amount of specificity; this granularity remains of limited specificity when reduced to 2-decimal accuracy. Because the date, time, and location will be determined by the ELD without modification by the driver, motor carrier, or any other individual, any alterations to these records would be considered tampering with an ELD under § 395.8(e)(2).

The output values for GPS location for the purpose of enforcement and compliance to the ELD rule may be 3 to 6 characters. If a carrier has more character requirements for its FMS there is no prohibition on having more precise information.

G. Special Driving Categories

1. Comments to the 2014 SNPRM

The SNPRM proposed to add a requirement for the ELD to provide the capability for a driver to indicate the beginning and end of two specific categories, namely, personal use of a CMV and yard moves, as allowed by the motor carrier. In these cases, the CMV may be in motion but a driver is not necessarily in a ''driving'' duty status. This would record the necessary information in a consistent manner for the use of drivers, motor carriers, and authorized safety officials.

In the data structures as defined in the SNPRM, XRS saw no allowance for identification for items such as adverse conditions, or 16-hour short haul exemption and requested guidance on how these should be identified or indicated in the files. Zonar asked for clarification on the special driving categories: How does FMCSA expect this to be displayed in ''Off-Duty'' and ''On-Duty Not Driving'' or is there no requirement?

While Omnitracs agreed with resetting the special driving situation to ''none'' if the ELD or CMV's engine goes through a power off cycle, it suggested that the same confirmation be allowed during yard driving that is allowed for authorized personal use of the CMV. This would enable the driver to turn off the engine when connecting or disconnecting a trailer when operating within a company's facility without the requirement to re-enter the annotation of yard driving each time the engine goes through a power cycle.

2. FMCSA Response

FMCSA does not require special identification to be built into an ELD for specific exceptions or adverse condition status. FMCSA expects drivers and motor carriers to use the annotation ability on the ELD to record these statuses.

Today's rule permits the driver to indicate the beginning and end of yard moves and personal conveyance, as allowed by the motor carrier. All other special driving categories, such as adverse driving conditions (§ 395.1(b)) or oilfield operations (§ 395.1(d)), would be annotated by the driver, similar to the way they are now.

The Agency feels that the allowance of multiple power off cycles would not provide a substantive reduction in inputs required by the driver during yard moves. In addition, this may create a potential for misuse of the off duty yard-move status.

H. Data Automatically Recorded

1. Comments to the 2014 SNPRM

The SNPRM proposed that the ELD would automatically record the following data elements: (1) Date; (2) time; (3) CMV geographic location information; (4) engine hours; (5) vehicle miles; (6) driver or authenticated user identification data; (7) vehicle identification data; and (8) motor carrier identification data.

Eclipse Software Systems stated that it had concerns that items (6) driver, and (8) motor carrier information cannot truly be ''automatically recorded.'' The ELD can make note of the current driver and carrier, but these values have been manually entered or selected by a human at some point. Unlike items 1 through 5, and 7, they are not provided by external sensors.

Inthinc Technology Solutions, Inc. (inthinc) stated that a driver may log out and then turn off the engine. It asked if engine shutdown should be recorded on the ELD record even though the driver is logged out.

Schneider requested confirmation that in § 395.32(a), where the words ''as soon as the vehicle is in motion'' occur, that the definition of 'motion' is the one found in the appendix, in section 4.3.1.2.

2. FMCSA Response

Today's rule provides that driver and motor carrier information will be the responsibility of the motor carrier, as reflected in § 395.22. After a driver's unique login to the ELD, this information will be available to the ELD and will be recorded by the ELD, with all the other data elements, at each change of duty status and at intermediate recording times.

With regard to comments about the engine status, FMCSA notes the ELD will automatically capture the engine on and engine off activities, including the date, time, and location of these activities. FMCSA expects the driver to enter a new duty status before turning the vehicle off. For example, if the driver intends to remain on duty, then the driver would enter that information and then turn the vehicle off. If the driver plans to switch from driving time to a sleeper-berth period, the new duty status would be entered before the vehicle is shut down. The precision of the data collected by an ELD is not intended to override the practical sequence of events needed to reduce to the greatest extent possible annotations and corrections.

The ELD will indicate the vehicle is in motion once the vehicle begins moving at a set speed threshold of up to 5 miles per hour.

I. Driver's Annotation/Edits of Records

1. Comments to the 2014 SNPRM

The SNPRM proposed that a driver may edit and a motor carrier may request edits to electronic RODS. All edits would have to be annotated to document the reason for the change. The SNPRM did not allow any driving time to be edited into non-driving time.

BigRoad noted that the annotation requires a 4-character minimum. Its database of logs includes hundreds of thousands of 3-letter notes that are meaningful. It stated that the restriction should be removed. Omnitracs stated that the term ''source data streams'' is too vague and should be changed to ''recorded data.'' Omnitracs recommended the process outlined in sections 4.3.2.8.1 and in 4.4.4.2 be amended to track only the original and the driver-approved final edit since they comprise the final record set. It also stated that the requirements regarding edits to driver ELD records do not sufficiently detail that only the original and final edits are to be maintained and are too restrictive regarding automatically recorded drive time edits. PeopleNet stated that the specifications in section 4.4.1.2 mean that if the driver is in Driving, gets to the destination, and turns off the ignition, he will remain in Driving, which is incorrect, but the ELD cannot reduce drive time.

2. FMCSA Response

The term ''source data streams'' has a broader meaning than ''recorded data.'' It includes all the information, recorded or not, that the ELD receives. FMCSA does not find that there is a reason to include 3-letter notes as acceptable annotations, and continues to require 4-character minimum codes. The Agency thinks that a code with a minimum of four characters will provide better quality information and specificity.

When the duty status is set to driving, and the CMV has not been in-motion for 5 consecutive minutes, the ELD must prompt the driver to confirm continued driving status or enter the proper duty status. If the driver does not respond to the ELD prompt within one-minute, the ELD must automatically switch the duty status to ODND. The time thresholds for purposes of this section must not be configurable. Accordingly, the driver status will most likely change to ODND under the PeopleNet scenario.

FMCSA declines to limit the record to only the original record and driver-approved edits. While an edit by a motor carrier normally requires recertification of the record by the driver, the Agency acknowledges that there will be instances where a driver is no longer available at the time of an edit. Although the edit and annotation would lack the required certification, retaining the carrier edits may provide a more complete picture of what occurred.

J. Driver's Data Transfer Initiation Input

1. Comments to the 2014 SNPRM

The rule indicates that a screen icon must be clearly marked and visible when the vehicle is stopped. Verigo asked for clarification regarding the required visibility of this icon at all times when the vehicle is stopped.

2. FMCSA Response

The icon is a function that allows the driver to easily transfer data at roadside. The supported single-step data transfer initiation mechanism (such as a switch or an icon on a touch-screen display) must be clearly marked and visible to the driver when the vehicle is stopped and data transfer is required. We expect that the ELD makers will meet the regulation requirements by incorporating user friendly and useful features to maintain market share.

K. ELD Data File

1. Comments to the 2014 SNPRM

In the SNPRM, FMCSA provided that an ELD must have the capability to generate an electronic file output, compliant with the format described in section 4.8.2, to facilitate the transfer, processing and standardized display of ELD data sets on the authorized safety officials' computing environments. FMCSA required that all output files be standardized on ELDs according to American Standard Code for Information Interchange (ASCII), which the Agency proposed incorporating by reference.

Zonar asked where the output file comment should be stored—within the driver records on the ELD, just in the support system, or both? If stored on the ELD only, when the ELD records are purged after the 7 or 8 days they are required to be retained, should it then be stored within the support system?

Omnitracs recommended replacing the word ''ELD'' in section 4.8.2 with the phrase, ''ELD or a support system used in conjunction with ELDs,'' the same language used in section 4.9.2. The commenter believed that use of the additional term would allow for closer alignment within the rules. Omnitracs also stated that there is nothing in the output file standard that specifies how to handle non-ASCII character sets such

as special characters that may be used either by Canadian cities/provinces or even in driver names.

In section 4.8.2.1 of the appendix to part 395, the SNPRM proposed that the ELD must produce a standard ELD data output file for transfer purposes, regardless of the particular database architecture used for recording the ELD events in electronic format. This ELD data output file must be generated according to the standard specified in section 4.8.2.1.

Omnitracs stated that all of the ''supporting'' elements (*e.g.* annotations, certifications, malfunctions, etc.) reference the event sequence ID number as the only means to associate to the actual driver duty change event (refer to 4.8.2.1.5, which contains the format for Event annotations or comments). If a driver's duty cycle consists of data recorded from multiple ELDs, these sequence IDs may overlap and may not be unique on the current ELD. It recommended that a secondary reference to the original duty status, which could include an ELD unique identifier, or even a date/time reference, be used. Omnitracs requested that there be further clarification on how to handle event sequence IDs when data on the ELD are a mix of data that have been recorded from different ELDs. The current language has no provision on how to handle data from different ELDs when there could be a sequence conflict.

Inthinc recommended that UTF–8 be used for output rather than ASCII. It also asked for examples of how output code should be parsed.

BigRoad stated that the comma-separated format described in the SNPRM is not based on any contemporary standard for structured data and already fails to accommodate some data requirements fully (see Table 6, Event Type 4). BigRoad wrote the format also fails to account for field values that might include inline commas or <CR> characters. The commenter also noted that a file format based on standards like extensible markup language (XML) would allow for more flexibility for future changes and could be paired with any character set encoding, including Unicode, to allow any character data to be captured correctly without loss of precision. BigRoad wrote that to restrict future flexibility of the data format to support a minority of devices seems shortsighted.

Since ELD data that are transmitted to FMCSA Web services are formatted as XML, BigRoad believed that XML should be used as the format for all transmission options. BigRoad wrote that using XML along with a formal XSD schema is beneficial when trying to ensure interoperability between disparate systems and would reduce the number of file format incompatibility issues when transferring data between systems.

BigRoad stated that the ELD data file specifications are not explicit about how to display and transfer data from drivers that produce records on multiple ELDs. The requirements to display multi-day data imply that data must be aggregated across all ELDs the driver uses. None of the ELD data files contains an identifier for the specific ELD that created the record, so if the records from multiple ELDs are aggregated the event sequence number ranges throughout the file could be discontinuous. If the intention is to produce data files containing ELD data aggregated across several ELDs, BigRoad believed adding an ELD identifier would mean that each separate ELD could be easily disambiguated.

2. FMCSA Response

In today's rule, section 4.8.2 is largely the same as proposed. Some changes have been made to accommodate comments and to clarify the rule. In response to the comment asking how the output file comment should be stored, it must be recorded in the output file and transferred to roadside enforcement or inspectors. All captured elements from the output file must be retained by the carrier for 6 months.

FMCSA understands that some capabilities of an ELD may not be located on the same physical device, or even in the CMV, but rather in a support system. FMCSA has provided flexibility in this rule for all provider types and their respective ELDs.

FMCSA requires that all information in the output file be standardized and only include ASCII characters. ASCII is a widely available standard within the United States, and is appropriate for the data required. Although ASCII does not provide for special characters, FMCSA feels that identification of proper names and cities can be clear without the insertion special characters.

The ELD technology option for any data transfers will require that the standard ELD CSV data file outlined in part 395 would be packaged into XML format. FMCSA will provide and manage ELD XML schema and all related instructions outlined in guidance, ''ELD Interface Control Document (ICD),'' to be placed on its Third Party Development site (3PDP). There is no prohibition on using an XML format internally. However, ELD output files have a standardized format. The format method accounts for the suggested needs, including that for Table 7, Event Type 4. In the respective section, only Event code is necessary as event type is implied by the section. Field values including inline commas or <CR> characters can be controlled for or pre-processed by the ELD provider. FMCSA has updated section 4.8.2.1. to accommodate a comma or carriage return by adding: ''(3) Any field value that may contain comma (',') or carriage return (<CR>) must be replaced with a semicolon (';') before generating the compliant CSV output file.''

The concern about HOS records from multiple ELDs is appropriate. FMCSA added data and time stamp fields to annotations to allow an improved method of disambiguation. There may still be rare situations where one or more drivers could have data in multiple ELDs that get combined into a single file having identical event IDs and slightly unsynchronized time stamps. The probability of this occurring is low, but not zero, and the consequences are minimal. An ELD Identifier data element that BigRoad mentions is already defined in the rule.

While today's rule does not include requirements concerning compatibility of files between ELD systems or the ability to upload drivers' duty status files from multiple systems, there is nothing in the rule that prevents collaboration among the providers to produce compatible products. In the absence of a compatibility standard, if a driver's duty cycle consists of data recorded from multiple ELDs, then the records will be in multiple files. If the ELD is set to combine them, then a provider could opt to use an additional field as a database element in order to keep them separated. In today's rule, FMCSA has added a secondary reference to the original duty status to include a date and time field. There are multiple methods to handle combining data from more than one source and FMCSA has purposely left this open for the innovation and flexibility of ELD providers.

L. Engine Power Up and Shut Down

1. Comments to the 2014 SNPRM

The SNPRM proposed that an ignition power on cycle refers to the engine power sequence changing from ''off to on and then off.'' This refers to a continuous period when a CMV's engine is powered.

Omnitracs asked if, since CMV ignition can be in the ''on'' position without the engine running, the ELD must capture when the ignition is in the on position without the engine running. The same commenter recommended

that the 1-minute time for power up be relaxed to 3 minutes to allow for a cold boot situation. Zonar asked what constitutes ''Ignition power on cycle'' when connected to a hybrid truck? A hybrid truck will not produce a RPM of greater than 0 until driven.

2. FMCSA Response

The technical specification included a capture for when the engine goes from on to off, but the intended data capture was for when the driver intended to drive the CMV. Though propulsion variations can be defined, FMCSA wants the specification to capture when the CMV is put into a state where it can be driven. Likewise, ignition on/engine on for a hybrid vehicle will be the status of vehicle ready to drive—the equivalent to ''engine on'' for an internal combustion engine. FMCSA continues to require the capture of the engine on data.

FMCSA does not accept the suggestion to relax the power up status to 3 minutes because the Agency believes that 1 minute is sufficient. Any cold boot event records that would be captured could be annotated, or would be clear from the type of activity that occurred. A 3 minute cold start would be a rare occasion, and would be captured as a diagnostic event, not as a fault, and should not impact driving time.

M. Engine Synchronization Compliance Monitoring

1. Comments to the 2014 SNPRM

The SNPRM proposed that an ELD monitor the data it receives from the engine ECM or alternative sources to record history to identify instances and durations of its non-compliance with the ELD engine synchronization, and establish a link to the ECM, as well as set an engine synchronization compliance malfunction if connectivity to any of the required data sources is lost for more than 30 minutes during a 24-hour period aggregated across all driver profiles, including the unidentified driver profile.

FMCSA also proposed that engine synchronization must be functional for all but 30 minutes in a 24-hour period. If it is not, an engine synchronization compliance malfunction must be logged.

If the vehicle ECM becomes unresponsive, XRS asked what value should be inserted into these fields to record the malfunction. There are other cases of failure that could prevent significant data being available to record (*e.g.,* Driver interface unit failing. . . . ''Data recording compliance'' malfunction). The ECM could recover at a later point and the system will be fully functional.

XRS wanted FMCSA to clarify the 30 minutes mentioned in this section. This could easily exceed 30 minutes in a 24 -hour period especially with many jurisdictions around the country prohibiting CMV drivers from idling their engines. There is the possibility that a vehicle bus under particular stress may not respond for more than 5 seconds. Clarification on the 24-hour period as well as the aggregate of the 30 minutes against all profiles may be difficult or give false errors.

Verigo noted that, given the wide variety of computer processor speeds and other sequencing events that may be encountered, the 5-second limit may introduce a significantly higher level of error reporting than necessary to promote safe operation. There have been several instances where the OBD–II interface does not become active when the ignition is switched on, but only after the vehicle is started. Without additional conditions to be checked, it seems likely that there will be invalid logs of engine sync failure for these vehicles (*i.e.* driver turns on ignition and listens to the radio). It would be useful if the Engine Sync Compliance Monitoring is not required to log a failure until after engine ignition is detected and motion is detected (via GPS) and vehicle data are not available.

Eclipse Software Systems stated engine synchronization must be functional for all but 30 minutes in a 24-hour period. If it is not, an engine synchronization compliance fault must be logged. This is problematic in that the engine bus is not always operational. When the engine is not powered and a cab door is not open, there is usually no activity on the engine bus. This is indistinguishable from the wires to the engine bus being disconnected. One action is harmless, the other is tampering.

2. FMCSA Response

Table 4 of the appendix explains the malfunction codes that must be listed for a variety of issues including engine synchronization compliance malfunctions. If the ECM or ECM connectivity is unresponsive for more than 5 seconds, or if the failure cannot be recorded until the ELD is fully functional again, Table 4 in the appendix outlines how to capture these malfunctions. These conditions are not expected to be occurring frequently but FMCSA acknowledges that on occasion that a malfunction or disconnection anomalies will occur, but still requires the ELD to adhere to the standard of consistent connectivity expected of the ELD product.

In regards to the concern about the aggregate 30 minute period in a 24 hour period, FMCSA believes that this is a generous standard for HOS compliance. If a driver is concerned about this malfunction, there are several ways, including a simple pre-boot, to ensure that the ELD is ready to receive data as soon as the ECM or ECM connection sends it. Additionally, when an ELD displays a malfunction, the authorized safety official should be able to see what the problem is and take that into consideration. There would be enough data in this instance to see what the issue was, and what the real driving time is. When the engine is not powered, the ELD does not have to capture data. The 30 minutes verifies that additional miles and movement has not taken place in the 24 hour period.

FMCSA clarifies that the ECM data or ECM connectivity data must only be captured when the engine is powered, but the ELD is not prohibited from recording information, if desired, when the engine is off. If the CMV is older than model year 2000, then the driver is not required to use an ELD. However, if that driver is voluntarily using an ELD in a vehicle older than model year 2000 with the connections required in section 4 of the appendix, then the interface should become active when the engine is on, not just when the switch is turned on.

N. Engine Miles

1. Comments to the 2014 SNPRM

The SNPRM proposed that engine miles be retrieved from an ECM if the CMV had an ECM. If a vehicle was older than model year 2000, and did not have an ECM, then the vehicle miles would have to be derived.

Zonar stated that there are multiple sources of engine miles. Because of widespread variability among CMVs with respect to what data can actually be readily extracted by ELD providers, Zonar believed FMCSA should consider a version of ELD that substitutes GPS-derived data (such as mileage) for data that cannot be readily obtained from a vehicle ECU or a vehicle data bus. Modern GPS fleet tracking devices can be wired securely and permanently into a vehicle, can be programmed to uniquely identify individual vehicles, and can provide very accurate mileage data and truck run time data to validate driver records.

2. FMCSA Response

Because today's rule is only mandatory for motor carriers operating

CMVs that are model year 2000 or newer, all engine miles must be derived from the ECM or ECM connection. Synchronization with a satellite for the receipt of GPS-derived data is not the same as being integrally synchronized with the engine of the CMV, as required in today's rule. Engine synchronization for purposes of ELD compliance means the monitoring of the vehicle's engine operation to automatically capture data, including: the engine's power status, vehicle's motion status, miles driven value, and engine hours value.

O. Records Logged Under the Unidentified Driver Profile

1. Comments to the 2014 SNPRM

The SNPRM proposed that all records logged be recorded on the ELD. If a driver did not respond to prompts to log in, that time became unassigned driving time, and would be visible to any authorized safety official viewing the ELD records.

Omnitracs stated that it was unclear how to handle unclaimed, unassigned driving time. It recommended that the persistence of unclaimed unassigned driving time only be kept on an ELD for 8 days (maximum duty cycle). After such time, the ELD may delete any recorded yet unclaimed unassigned drive time. In addition, unassigned driving time should be sent to any ELD support system (*e.g.,* host system) for future assignment if the driver does not claim unassigned driving time on the ELD directly.

Omnitracs recommended an exception to this requirement in the case of unit maintenance where the ELD may be completely ''reset'' and all data purged from the ELD. In this situation, the ELD is allowed to act as a ''new'' ELD with no driver history. In addition, Omnitracs recommended that any ELD support system not be required to maintain this information and then ''push'' back to the ELD post maintenance.

2. FMCSA Response

All data for the last 8 days, including unassigned driving time, must be available at roadside. There is no requirement that unassigned driving time be available at roadside after 8 days. All data older than 8 days can be purged from the ELD, but all data, including unassigned driving time, must be available to inspectors at the motor carrier's principal place of business for 6 months.

P. Power-On Status Time

1. Comments to the 2014 SNPRM

The SNPRM stated that an ELD must be powered within 15 seconds of the vehicle's engine receiving power and must remain powered for as long as the vehicle's engine stays powered.

XRS stated that FMCSA needs to clarify the definition of power on the device within 15 seconds referencing Fig 1. XRS asked if this is for internal processing or is this for all input and outputs? There are portable devices commercially available that can take much longer than 15 seconds to be available; these are tablets, ruggedized handheld computers, and smart phones that can meet all other ELD recording requirements. Omnitracs raised the same issue. It stated that a better solution would be for the system to read and retain data from the ECM; a 180-second time frame would better accommodate existing hardware that could have slower cold boot capabilities. Omnitracs and inthinc noted that the rule does not indicate what ELD functionality is required.

2. FMCSA Response

As part of the ELD User Guide or a driver Standard Operating Procedure on proper use of the ELD, FMCSA will recommend that the driver turn on the engine and then power on and start up the ELD, before moving the vehicle. However, the requirement remains the same; the device must receive power within 15 seconds, and the driver should pre-boot the equipment prior to powering up the vehicle. Similarly, at power off and shutdown, FMCSA will recommend driver certifications of records, followed by ELD log off, followed by engine shutdown. By not following these recommendations, malfunction codes and annotations will be needed in order to explain unaccounted odometer changes and suspicious driving activity.

This 15 second start up time is not unreasonable, compared with other start up times for similar technology. However, in response to the concern from commenters, FMCSA extends the requirement to a period of 1 minute for full functionality in today's rule. Additionally, any reboots that take longer would already be logged as power diagnostic events.

Q. Time

1. Comments to the 2014 SNPRM

The SNPRM proposed that the ELD automatically record the time at changes of duty status and certain intervals (§ 395.26(b)(2)). As described in the proposed data elements dictionary (proposed section 7.1.39; section 7.40 in this rule), even though time must be captured in UTC, event records must use time converted to the time zone in effect at the driver's home terminal.

Proposed section 4.6.1.3, timing compliance monitoring, would have required an ELD to periodically cross-check the automatically acquired date and time with an accurate external UTC source.

Zonar asked FMCSA to clarify all sections that reference time format. Zonar commented that it can be very difficult to calculate a true 24 hours and accurately record time unless there is a one consistent format; multiple formats cause inconsistencies in data. If one event needs to be recorded as HH:MM:SS then all clocks within an ELD need to run on this format. If the HH:MM:SS clock needs to record an HH:MM for a different event, the commenter asked how the ELD should handle the seconds—does it round up or down. Zonar asked for specific examples within guidance to this question and suggested an HH:MM clock to eliminate the need to round the seconds.

Eclipse Software Systems stated that it had seen many projects in the past where storing time in the local format leads to problems, particularly when at or near daylight savings changeovers. While it is only 1 hour per year, when daylight savings occurs in the fall, there are two periods from 1am to 2am. All events during those 2 hours are ambiguous. It recommended that all times be stored and reported in UTC, which is what is reported by GPS systems by default.

Omnitracs stated a concern about recording a qualifying 34-hour restart. With respect to timing compliance monitoring, Eclipse stated that aside from GPS, it is difficult to obtain other reliable sources of the precise time. It has seen cell towers (which are not accessible from all proposed ELDs) have time stamps that are years off. The ELD could watch for backdating, if a time stamp from GPS is ever before another received timestamp from GPS, but other validation would be quite difficult.

2. FMCSA Response

In response to comments, FMCSA changes the time to be captured in today's rule to include seconds. Today's rule requires an ELD to convert and track date and time—captured in UTC standard—to the time standard in effect at driver's home terminal, taking the daylight savings time changes into account. An ELD must record the driver's RODS using the time standard

in effect at the driver's home terminal for a 24-hour period beginning with the time specified by the motor carrier for that driver's home terminal.

The data element ''Time Zone Offset from UTC'' must be included in the ''Driver's Certification of Own Records'' events as specified in section 4.5.1.4. Time must be stored in UTC, and reported in carrier's local time. If an ELD stored it in a different format that was translated to UTC, this would be acceptable.

In today's rule, FMCSA does not require the ELD to record State time. FMCSA does not believe that it is necessary for the ELD to record State time for HOS compliance. However, FMCSA does not prevent ELD providers from including State time as part of a compliant ELD.

In regard to the comment on timing compliance monitoring, this section of the rule has been clarified per the requester's suggestion and the rule no longer requires the ELD to cross check time if it uses GPS.

R. User List

1. Comments to the 2014 SNPRM

In section 4.8.2.1.2, the SNPRM proposed that the ELD should provide a ''user list.'' In chronological order, this user list shows all drivers and co-drivers with driving time records on the most recent CMV operated by the inspected driver or motor carrier's support personnel who requested edits within the time period for which this file is generated.

If ELDs are swapped on a CMV, Omnitracs believed that the new ELD should not be required to know the driver list for the CMV prior to the ELD being installed in the CMV. XRS stated that FMCSA needs to describe how this user list would be used at roadside and if there could be a validation process for its use. Depending on the time of day, there may be users who will not be in the CMV user list from the support system due to last time the CMV communicated with the host.

2. FMCSA Response

For a reset or replaced ELD, today's rule requires data or documents showing the driver's RODS history in the vehicle. This data would include the driver's past 7 days of RODS either loaded into the ''new'' ELD or in paper format to be provided at roadside. There is no requirement that the ELD have a wireless connection.

In the case of ELDs that include a wireless connection, a user list must be available up to the date from the last time the CMV or ELD communicated with the host or back office system.

S. ELD Vehicle Interfaces

1. Comments to the 2014 SNPRM

In the SNPRM, section 4.2 of the technical specifications proposed that an ELD must be integrally synchronized with the engine of the CMV. Engine synchronization means monitoring the vehicle's engine operation to automatically capture engine's power status, vehicle's motion status, miles driven value, and engine hours value. An ELD used while operating a 2000 or later model year CMV, as indicated by the tenth character in the VIN, that has an engine ECM, must establish a link to the engine ECM and receive this information automatically through the serial or Control Area Network communication protocols supported by the vehicle's engine ECM. The SNPRM proposed that if a CMV is older than model year 2000 and does not have an ECM, an ELD may use alternative sources to obtain or estimate these vehicle parameters with the listed accuracy requirements under section 4.3.1.

XRS asked FMCSA to clarify if a link to the ECM is the only method for the ELD to receive information or could information be received from specific ECUs in the vehicle; *e.g.,* can the ELD interface with other components on the bus including the instrument cluster and the vehicle management system. Because there is not Fstandardization on the OBD that is published with the Society for Automotive Engineers for odometer and other elements that could be captured, XRS asked what FMCSA would expect manufacturers to capture for light duty vehicles. The same commenter wrote that FMCSA needs to coordinate with National Highway Transportation Safety Administration concerning the requirements of the capturing of ECM data. For light duty vehicles that may be required to use an ELD, FMCSA should require providers of OBD–II to supply proprietary or public information to satisfy the regulation requirements for ECM data capture. XRS also believed that ECM data capture of specific OBD–II data requirements may increase the overall cost of ELD solutions.

2. FMCSA Response

FMCSA agrees that mandatory transfer through the OBD–II could require additional information transfer or equipment. In today's rule, FMCSA does not require drivers of CMVs manufactured before model year 2000 to use ELDs. However, if a driver of one of those vehicles voluntarily uses an ELD, they must do so in compliance with section 4.2 of the technical specifications in today's rule. As indicated in that section, if an ELD is being used voluntarily in a vehicle older than model year 2000, it may use alternative sources to obtain or estimate the required vehicle parameters with the listed accuracy requirements under section 4.3.1. However, any CMV manufactured beginning model year 2000 must use an ELD that connects to the ECM.

FMCSA believes that the ECM or ECM connectivity is the best and most cost-efficient source of data. However, FMCSA understands that drivers with non-ECM engines might see benefits from the use of an ELD. Today's rule requires a reasonable proxy for the data if the ECM or ECM connectivity is not providing it. So although a connection to the ECM or ECM connectivity is preferable, voluntary use of an ELD could be used with any CMV, provided the accuracy specifications are met.

T. Vehicle Miles

1. Comments to the 2014 SNPRM

Section 4.3.1.3 of the SNPRM proposed that an ELD must monitor vehicle miles as accumulated by a CMV over the course of an ignition power on cycle (accumulated vehicle miles) and over the course of CMV's operation (total vehicle miles). If the ELD is required to have a link to the vehicle's engine ECM (as specified in section 4.2), the ELD must monitor the ECM's odometer message broadcast and use it to log total vehicle miles information and determine accumulated vehicle miles since engine's last power on instance. Otherwise, the accumulated vehicle miles indication must be obtained or estimated from an accurate source (within ±10 percent of miles accumulated by the CMV over a 24-hour period, as indicated on the vehicle's odometer display).

XRS suggested that FMCSA define specifics of odometer use that are acceptable. XRS questioned if the odometer may be used from the instrument cluster. XRS believed that the proposed method is inconsistent.

Zonar stated that heavy-duty vehicles may have more than one controller on the data bus that provides odometer value in verifying levels of precision. Zonar suggested pulling the mileage from the dash as this is more accurate than the engine and is in-sync with what will be on the dash.

Eclipse Software Systems stated that it would avoid calculating and storing the mileages for each on/off pair. It is simpler to record the odometer at the required intervals (duty status changes and hourly). The elapsed miles can be

calculated (perhaps by eRODS) for each driving segment (and hour) using only that data.

2. FMCSA Response

By definition, an ELD means a device or technology that automatically records a driver's driving time and facilitates the accurate recording of the driver's HOS, and that meets the requirements of subpart B of this part. The data received from the ECM is more accurate than the data that is displayed on the dash. However, when there is no ECM or ECM connectivity in the CMV, and an ELD is being used voluntarily, vehicle miles can be derived from either engine or dash odometer, provided that method of transfer meets the accuracy specification in section 4 of the technical specifications. If the reading of the mileage meets the accuracy specification required in section 4 of the appendix, although it could be slightly different in the ECM than on the odometer, the reading ensures the vehicle mileage data is of value. In the case of large anomalies between the two readings, the authorized safety official will decide whether further investigation would be required.

U. Vehicle Motion Status

1. Comments to the 2014 SNPRM

In section 4.3.1.2, the SNPRM proposed that an ELD must automatically determine whether a CMV is in motion or stopped by comparing the vehicle speed information to a set speed threshold. If an ELD is linked to the ECM, vehicle speed information must be acquired from the engine ECM. Otherwise, accurate vehicle speed information must be acquired using an independent source—apart from the positioning services described under section 4.3.1.6.

Omnitracs recommended a second distance threshold as an additional means to automatically detect and transition into driving status. This commenter believed that simply using a speed threshold could potentially reduce accuracy in determining an actual driving event. Ongoing verification of this accuracy would require an alternate source of speed detection and is not feasible during normal operation. In addition, Omnitracs believed this level of accuracy (+/ − 3 miles per hour tolerance) should only be required at the bottom end of the speed values used for motion detection and not be required at higher speed readings (*e.g.* at 75 mph).

2. FMCSA Response

FMCSA continues to believe that a speed threshold is the best way to determine accurate motion. FMCSA declines to create an alternate threshold that relies upon distance; the data files and the actual location will show how far the CMV has moved. Any additional threshold that captures vehicle motion before the speed threshold required by the rule is met is acceptable. However, as soon as the required speed threshold is met, the ELD must record, even if the alternate threshold is not met.

In today's rule, once the vehicle speed exceeds the set speed threshold of no more than 5 miles per hour, it must be considered in motion until its speed falls to 0 miles per hour and stays at 0 miles per hour for 3 consecutive seconds, at which point it will be considered stopped. FMCSA has established this requirement to determine the initiation of vehicle motion, which is at a very low speed of no greater than 5 miles per hour. The accuracy does not apply to highway speed.

V. Wireless Electronic Transfer

1. Comments to the 2014 SNPRM

Proposed section 4.10.1 provided that ELDs must transmit records electronically in accordance with a specified file format and must be capable of a one-way transfer of these records to authorized safety officials upon request. Proposed section 4.10.1.1 described the standards for transferring ELD data to FMCSA via Web services.

BigRoad stated that section 4.10.1.1 describes how an ELD provider must obtain a public/private key pair compliant with NIST SP 800 32. Using a private key in this scenario is not ideal since it would have to be stored on every ELD that might create the email and is therefore exploitable via memory inspection or code disassembly.

2. FMCSA Response

All required security measures for data transfer with the Agency, public or private, will require strict adherence to NIST for all data in transit or 'handshakes' between Government and private systems. DOT guidelines follow NIST 820. The exact Public Key Infrastructure (PKI) for ELD data transfers will be distributed once ELD providers register and certify ELDs.

W. Pre-2000 Model Year CMVs

1. Comments to the 2014 SNPRM

FMCSA sought comments on issues related to installing and using an ELD on CMVs manufactured prior to model year 2000. The SNPRM required all drivers using RODS to use an ELD, regardless of the CMV the drivers operate.

The California Construction Trucking Association said that while it is possible to retrofit an older truck, its research indicates that it is costly, at about $1,000 per truck in California. In contrast, Continental stated that it would cost between $100 and $300 per vehicle.

For vehicles that do not have a diagnostics port, but have an electronic speedometer, Continental stated that the ELD can use the analog speed signal to calculate the odometer and engine hours. This functionality is already integrated in some existing AOBRDs at no additional cost. For vehicles that do not have a diagnostics port and that have a mechanical speedometer (mostly built before 1992), Continental wrote that a speed sensor must be added to convert the mechanical signal into an electronic pulse signal.

XRS stated that the GPS solutions and related costs for black boxes could have an incremental cost of $250 per vehicle.

PeopleNet stated that obtaining speed from a source other than the ECM or GPS will be very complex and cost-prohibitive. When a connection to the ECM is not available, it recommended that GPS be used to determine vehicle speed. The commenter wrote that non-GPS options to determine vehicle speed include ranging laser, accelerometer, revolution counter (tire); or camera. PeopleNet did not believe any of these options could ensure accuracy within (plus or minus) 3 miles per hour of the CMV's true ground speed.

Zonar supported using GPS-based ELDs for older CMVs. It stated that modern GPS fleet tracking devices can be wired into a vehicle, be programmed to identify individual vehicles, and provide very accurate mileage data and truck run-time data.

The Truck and Engine Manufacturers Association raised questions about whether FMCSA was referring to model years or calendar years. The commenter believed that the additional requirement that the engine actually have an ECM is crucial in the event that a mechanically controlled engine was installed in a vehicle with a model year 2000 or later.

One carrier stated that OBD–II ports data could not be shared if they are already dedicated for another purpose. Another problem is that there are five different protocols used in OBD–II and the software is proprietary to the vehicle manufacturer. This would require the vehicle manufacturer to release their software to use the OBD–II to capture the necessary data effectively.

2. FMCSA Response

When FMCSA developed the technical specifications, the Agency considered whether ELDs could be easily installed in the full range of CMVs operated by drivers subject to the HOS requirements. The Agency determined that the most practical and cost-effective means of achieving compliance is the use of the ECM or ECM connectivity or OBD–II ports. Generally, these options are available in all the vehicles manufactured beginning with model year 2000 and on many pre-2000 vehicles. After reviewing the comments in response to the SNPRM, the Agency believes that imposing a requirement for ELDs on pre-model year 2000 vehicles is not feasible in all cases and that trying to distinguish when it is a viable option is too difficult in this rulemaking and next to impossible at the roadside.

Some private-sector publications, such as the IHS Inc.'s March 2014 publication ''Quarterly Commercial Vehicle Report,'' suggest that the population of pre-2000 Class 3 through Class 8 CMVs (CMVs with a gross vehicle weight rating greater than 10,000 pounds) is approximately 35 percent of the registered CMVs in operation (4,178,000 pre-2000 versus 7,723,000 2000-current). These vehicles will have been in operation more than 17 years by the compliance date of this rule. Therefore, the percentage of these vehicles operated by drivers who are required to use ELDs is likely to be small.

The Agency decided not to use alternate technology for vehicles without ECMs, ECM connectivity or OBD–II ports. While FMCSA is aware that there are technologies that would make this possible, it does not mandate their use. In the RIA for today's rule, FMCSA estimates that there will be approximately 209,000 pre-2000 model year vehicles in 2017. FMCSA has decided to exempt this relatively small population of CMVs.

Concerning the comment from XRS, part 395 does not require black boxes nor is there anything in the SNPRM related to 'black box' modification. Each ELD provider supports proprietary communications via satellite, code division multiple access or CDMA, Bluetooth, etc. The market dictates these products and their communication needs.

X. Authenticated User and Account Management

1. Comments to the SNPRM

Section 395.22(b)(2)(i) of the SNPRM would have required that the motor carrier actively manage the ELD accounts. The motor carrier would have to include certain identification data elements in the ELD user account assigned to a driver (§ 395.22(c)). These data elements include the driver's license number and the name of the State that issued the license. Under the proposal, the motor carrier assigns the ELD username during the creation of a new ELD account (§ 395.22(b)(2)(ii)). As proposed, the ELD username is any alphanumeric combination, 4 to 60 characters long, but it cannot include either the driver's license number or social security number. The SNPRM also proposed adding unique authenticated-user profiles for all users of the ELD and its support system, to increase transparency and responsibility between a motor carrier and its drivers, as well as to prevent fraudulent activities.

Commenters expressed concern with the requirements for user names. FedEx stated that it is too restrictive. Because current usernames are sufficiently identifying drivers, FedEx suggested that FMCSA expand this requirement to allow ELD users to set the format of their own usernames. Concerns about the creation of multiple aliases for a single driver could be addressed via DOT compliance reviews.

FedEx stated that the requirement does not accommodate all motor carrier structures. FedEx suggested that the user rights management rule require that ELD accounts are managed appropriately and that the motor carrier is responsible for any failures. With the carrier ultimately responsible, the rule need not dictate who must manage the account.

ATA stated that FMCSA should consider alternatives that accomplish the same objectives and include the same protections against fraud. This alternative would prevent carriers and providers from having to implement new systems to assign identifiers based on CDL numbers.

Saucon Technologies stated that requiring drivers to enter their entire CDL number and State presents some technical challenges. Many existing ELD solutions do not provide the ability to enter alphabetical characters, only numeric characters. Requiring the name of the State and entire CDL number would necessitate new hardware and increase the time required for drivers to sign on. Schneider asked for clarification on what proper identification data are as they relate to logging into an ELD.

AGC stated that in its industry multiple drivers—including temporary employees—may use a vehicle. FMCSA should establish a more secure means to identify the driver operating the vehicle and tie the resulting ELD records to that driver.

Several commenters stated that the requirement that a person have a single role (driver or support person) fails to accommodate smaller carriers where there is no support staff and the driver/owner fills both roles.

BigRoad stated that proposed section 7.1.13 (7.13 in this rule) indicates that a person who is both the driver and the support person would need to maintain two separate accounts in the system, since each account can only be given a single role in the ELD account type field. That person would have to switch between accounts to perform different functions on the same system, creating an unnecessary administrative burden. XRS, Omnitracs, inthinc, and Zonar also raised this issue. XRS asked if account creation can be performed on the host and if the credentials can be stored on the host.

Zonar asked how a driver can certify his or her records at the end of a 24-hour period if the driver has gone off duty for multiple days. It suggested allowing the driver to confirm the records on the driver's return to duty.

Section 395.32(c) describes the carrier's responsibility to review unidentified driving records; however, it does not establish an expectation for when the motor carrier must complete the review. Schneider recommended that the rule specifically state the number of days a carrier is allowed to research and assign the unidentified driving segments or annotate the record explaining why the time is unassigned. Because the carrier has to make contact with the driver or research if the tractor was moved by maintenance, one commenter believed that 8 days is a reasonable time frame to allow for this research to be done.

2. FMCSA Response

FMCSA acknowledges commenters' concerns, but emphasizes that the rulemaking does not impose the types of restrictions on usernames and passwords that the commenters described. Section 4.1.2 of the appendix to part 395 covers account creation with the explanation that each driver account must require the entry of the driver's license number and the State of jurisdiction that issued the driver's license into the ELD during the account creation process. The driver's license information is only required to set up the user account and verify the identity of the driver; it is not used as part of the daily process for entering duty status information.

There may only be one user account per driver's license number and the carrier would be responsible for establishing requirements for unique user identifications and passwords. Therefore, the burden that commenters believed would be imposed by the rule was not intended and indeed is not a requirement in this rule.

This rule does not differentiate between temporary and permanent employees, nor does it affect how many drivers may use a CMV. Each motor carrier that assigns a driver to operate a CMV under its DOT number must establish and manage an ELD user account for that driver.

Each driver should have one account that allows him or her to login and perform driver-related functions specific to the driver. All other administrative functions should be based on the discretion of each company or its provider. This means a driver who is also the owner of the company would have a single account authorizing entries as a driver, and a separate account for administrative functions. Accounts can be created on the ELD or the ELD support system.

In response to Zonar's comments, FMCSA emphasizes that a driver only needs to certify his or her records for each 24 hour duty status period he or she is on duty. This is the case under the HOS rule and the ELD rulemaking does not alter the duty status requirements under the HOS rule. The ELD would allow the record to be confirmed as off-duty when the driver returns to duty. There is no prohibition on a driver certifying multiple days off on a single RODS. And, in the case where the driver has Web-based access to review the records and make certain edits or entries, the rule does not prohibit the driver from logging into the system to provide updates on the duty status when there are multiple days away from the CMV. This is also a means for drivers employed by more than one motor carrier to update records between carriers.

Regarding the issue of providing carriers enough time to audit electronic RODS and make corrections, FMCSA does not place limits on when an annotation or correction may be made. The motor carrier must maintain the original record so that authorized safety officials can compare the chronology with the annotations and corrections, and supporting documents.

Y. ODND Time

1. Comments to the 2014 SNPRM

The existing HOS rules require a driver to record in his or her RODS any ODND time, even if it is not in the truck (see § 395.2, On-duty time). The SNPRM did not propose any changes to this underlying HOS requirement.

Saucon Technologies, XRS, Zonar, and PeopleNet suggested that FMCSA clarify how ODND time is to be managed when the driver is not at the truck. PeopleNet stated that many customers use payroll integrations to put their drivers on duty (*i.e.,* when the driver swipes the time clock, it puts the driver on duty via the AOBRD). Payroll integrations also allow administrators to put a group of drivers on duty to account for time spent at a safety meeting.

2. FMCSA Response

FMCSA emphasizes that today's ELD rule does not change the underlying HOS requirements. The ELD automatically captures the date, time and location when the vehicle is turned on and turned off, when someone starts to drive the vehicle, and when the individual stops driving. The system also captures automatically the date, time and location when manual entries are made so that the driver's location and time are captured when manual entries (such as on-duty, not driving, or sleeper berth) are entered. An ELD system relies upon the driver to enter information about the duty status when the vehicle is stopped or parked. The ELD captures the same duty status options that are available to drivers currently relying upon paper RODS. The technical specifications do not prevent supervisors from having administrative rights to add ODND time onto drivers' ELD records.

With regard to time a driver may spend working for another employer, the time must be counted as on-duty time, either driving or not driving. This is required by the current HOS rules, and the ELD mandate does not change this fact. The ELD system mandated by this rule provides drivers with the ability to update their RODS to account for time the device is not capable of generating automatically.

Z. Data Transfer

1. Comments to the 2014 SNPRM

The SNPRM used a menu-style approach, and several of the compliant options would have required wireless connectivity. The SNPRM proposed that all ELDs would need to use one of seven combinations of USB 2.0, printouts of QR codes, TransferJet, wireless Web services, Web email, and Bluetooth for the electronic transfer of data to authorized safety officials. One alternative included a printout. The SNPRM also required an ELD to be able to present a graph grid of the driver's daily duty status changes either on a display unit or printout.

Omnitracs stated that the SNPRM's technical requirements for data transfer mechanisms, and the options provided, use technologies that are not easily adaptable or readily available for enforcement to deploy. The IME generally supported requirements to ensure that the ELD would be able to communicate with officials at roadside.

IFDA stated that the requirement that systems use a ''standardized single-step driver interface for compilation of driver's ELD records and initiation of the data transfer to authorized safety officials . . .'' is unnecessary and overly prescriptive. Many devices currently in use require the driver to perform more than a single step to display the information. These systems do not pose a significant burden for drivers or authorized safety officials and do not appear to compromise safety in any way. IFDA opposed the requirement for a graphic display or printout, and they felt that these unnecessary requirements would add additional costs without any commensurate safety value.

CVSA believed that the regulation should require a practical standard interface for manual roadside inspections: ''A requirement for a printout of the HOS graph grid showing the same information contained in the paper logs is a proven, reliable, and cost-effective technical solution that would significantly enhance the enforceability of the regulation.''

PeopleNet stated that providers should have to support only one primary and one secondary method.

Boyle Transportation recommended FMCSA require support systems for ELDs, use Web services exclusively, allow display mode for inspections, and limit electronic submissions.

A rural transit provider stated that connectivity is not available in many areas, so Internet and cellphone reception is not possible. ELDs that rely on such connectivity are not viable.

2. FMCSA Response

In consideration of the comments, FMCSA revised the data transfer options, by establishing two options for electronic data transfer (option one is a telematics-type ELD with a minimum capability of electronically transferring data via wireless Web service, and email; option two is a ''local connectivity'' type ELD with a minimum capability of electronically transferring data via USB 2.0 and Bluetooth). Additionally, both types of ELDs must be capable of displaying a

standardized ELD data set in the format specified in this rule via printout or display to an authorized safety official on demand. FMCSA's changes address comments and concerns about the types of data transfer, as well as provide flexibility for providers and motor carriers looking for ELDs to suit different business needs and costs. These changes are discussed in more detail in the next few sections.

Although areas within the United States where data connectivity is not available are shrinking, FMCSA understands that some areas of the country do not have such access. Today's rule allows for alternative methods of data transfer including Bluetooth and USB 2.0. Where data transfer is not practical, the driver can still show enforcement compliance via a printout or the ELD display. Due to potentially hazardous conditions (*i.e.,* weather, traffic, etc.) during roadside inspections, authorized safety officials may ask drivers to hand them their ELD outside of the CMV so that they may examine the ELD display of data at a safe distance outside of the CMV. Absent a printout, an ELD must be designed so that its display may be reasonably viewed by an authorized safety officer without entering the CMV.

AA. USB 2.0

1. Comments to the 2014 SNPRM

J.B. Hunt, Continental, and PeopleNet supported USB 2.0 as a method to electronically transfer data due to its low cost, and ease of deployment without complex IT infrastructure nor any monthly communication and service fees. With appropriate security software on the USB 2.0 device, J.B. Hunt wrote there could be safeguards to avoid transmission of malware. Eclipse Software Systems recommended requiring ''at least one'' USB 2.0 port on ELDs.

In contrast, the National School Transportation Association (NSTA), BigRoad, Omnitracs, inthinc, and Drivewyze Inc. (Drivewyze) did not fully support USB 2.0 as a required backup method for the electronic transfer of data due to future hardware design constraints, security/encryption concerns, lack of availability of connections on computers, and probable obsolescence. J.J. Keller and Associates, Inc. (J.J. Keller) noted that requiring a specific technology, such as USB 2.0, constrains the hardware design to meet the specifications. This will likely cause more frequent upgrades in hardware to adapt to more modern USB 2.0 flash devices, increasing cost to industry. Inthinc recommended that the rule state that USB transfer is specifically for a drive—not for just a cable—and that the USB 2.0 port on the ELD can be an accessory to the ELD.

2. FMCSA Response

FMCSA believes that USB 2.0 is a cost-effective, technically viable option for many authorized safety officials to obtain an electronic data file from an ELD. The Agency acknowledges that some States have IT security—related restrictions that would preclude their officers from relying on USB 2.0 drivers or USB 2.0 connections to the ELD as a means of retrieving the RODS information. This information was presented during the MCSAC's session concerning ELD technical specifications. The Agency continues to believe it should be included in the list of options for making data files available to roadside inspectors. It is not expected that this option would be used by every State, but retaining a range of capabilities required on the driver side, including USB 2.0 capability, will help to ensure flexibility for the enforcement community. In the SNPRM, the USB 2.0 as a part of almost every option for an ELD. In today's rule, the USB 2.0 is a requirement, along with Bluetooth under only the ''local data transfer '' option, meaning that it would be possible to have a compliant ELD that did not have USB 2.0 if the telematics-type ELD is selected for use.

In regard to USB standards becoming obsolete, that is the case with any technical standards irrespective of whether the standards are referenced in a rulemaking. The criticism of the USB 2.0 standard not being widely used by authorized safety officials is no longer relevant, given that authorized safety officials will have the option, under today's rule, to utilize Bluetooth instead of USB 2.0 for electronic data transfer.

BB. Wireless Data Transfer Through Web Services

1. Comments to the 2014 SNPRM

PeopleNet recommended using a Web Service as a primary electronic data transfer method, while Continental supported it as an option, but not a mandate.

BigRoad recommended eliminating wireless data transfer through Web Services to simplify inspection requirements. Omnitracs stated there is a need for clarification around the use of the public/private keys in this section, including security provisions and the process for refreshing the public/private keys as a part of security best practices.

Inthinc recommended Representational State Transfer (REST), noting that Simple Object Access Protocol (SOAP) is much more difficult and expensive to implement, and it is becoming archaic.

2. FMCSA Response

FMCSA believes that Web Services will be a viable data transfer option for telematic ELD providers. SOAP is a standards-based Web services access protocol utilized for telematics data transfers. Therefore, today's rule retains Web Services as a valid method of data transfer, one of the two methods described in section 4.9.1(b) to transfer data as part of the telematics option, along with wireless email.

FMCSA has clarified the public/private key in section 4.10.1.1. of the technical specifications of this rule.

CC. Wireless Services via E-Mail

1. Comments to the 2014 SNPRM

J.B. Hunt and inthinc supported email as a viable, low cost option for electronically transferring ELD data. Inthinc believes that ELDs could have all inspection station email addresses pre-programmed or ELDs could automatically send emails to these addresses upon entry to inspection stations. Continental supported it as an option, but not a mandate.

Drivewyze said that this option is redundant with Web services and could be cut. BigRoad recommended eliminating this option to simplify inspection requirements.

Omnitracs stated there is a need for clarification around the use of the public/private keys, including security provisions and the process for refreshing the public/private keys as a part of security best practices.

2. FMCSA Response

Today's rule allows the use of email as a part of the telematics ELD specifications in section 4.9.1(b) of the appendix to part 395, along with Web services. FMCSA does not believe it is redundant because it provides a way for enforcement to access the data without using FMCSA or other government systems. Authorized safety officials could use either Web services or wireless email to verify ELD data from an ELD with this telematics option.

FMCSA agrees that inspection stations and other enforcement Agencies could post or share a standardized email address but does not require this. FMCSA believes a benefit of transferring ELD data to authorized safety officials by email is a viable method to submit data to the officer if necessary.

FMCSA clarifies the public/private key requirements in 4.10.1.1(4)(b)(2) of the technical specifications.

DD. Bluetooth

1. Comments to the 2014 SNPRM

Drivewyze recommended Bluetooth as a viable data transfer option. Continental supported it as an option, but not a mandate.

J.B. Hunt noted that Bluetooth transmissions are short-range, which would limit the effectiveness of this technology. Eclipse was concerned about Bluetooth personal area network in the roadside environment, commenting that Bluetooth has a typical operating range of 30 feet. Many officers use laptops mounted in their patrol vehicles, which sit behind the truck and a 52-foot trailer, making reception from the patrol car cab unlikely.

Verigo and inthinc disagreed with including Bluetooth as a means of electronic data transfer. Garmin Ltd. (Garmin) believed the description of transferring ELD records using the Bluetooth transfer method in section 4.10.1.2 should be further clarified.

Once the connection is successfully established, this section indicates that the ELD must connect to the official's technology via wireless PAN and transmit the required data via Web Services as described in section 4.10.1.1. Garmin wanted FMCSA to consider the case where the official's device cannot connect to the internet. In this scenario, it will also be possible to transfer the ELD records directly to the official's device over Bluetooth.

2. FMCSA Response

FMCSA included Bluetooth as part of the local data transfer ELD option specifications in section 4.9.1(b), along with USB 2.0 connectivity. FMCSA acknowledges that Bluetooth has its limitations as all technologies do, but, it is a widely used, reliable, short range non-telematic data transfer method.

In today's rule, FMCSA changed the language in 4.10 to clarify the fact that the Bluetooth transfer does not occur via telematics, as was written in the SNPRM. If a driver is using a local data transfer method and the officer cannot accept the data for some reason, the officer has the ability to request the data in the form of a display on the ELD or a printout, depending on the type of ELD.

FMCSA does not agree with the commenter who stated that Bluetooth is not designed for this type of transfer; the mechanism for data transfer does not distinguish between the types of data being transferred.

EE. QR Codes and Transfer Jet

1. Comments to the 2014 SNPRM

Overall, none of the commenters supported QR codes or TransferJet as feasible solutions for electronically transferring ELD data for the purposes of roadside enforcement.

Omnitracs, PeopleNet, XRS, inthinc, and Drivewyze did not believe that QR Codes are a viable ELD data transfer option at roadside. Omnitracs wrote that typical drivers would need to present between 6 and well over 30 QR codes that must be scanned by an authorized safety official in the proper order, which does not seem to be realistic in the field. Issues with screen size, screen resolution, the type of scanner (camera versus laser), and the amount of data that needs to be transferred adversely impact the ability of an authorized safety official to successfully scan the QR codes. Drivewyze stated that on-screen QR codes cannot be scanned, and printed QR codes are redundant with printing grid graphs. As a result, QR codes were recommended to be removed as an option.

Drivewyz, BigRoad, PeopleNet, Continental, and J.B. Hunt questioned the feasibility of TransferJet as a viable method of electronically transferring ELD data to roadside officials. J.B. Hunt, XRS, and Drivewyze noted that TransferJet is not a mainstream technology. PeopleNet and XRS also stated that TransferJet is not widely used except in smartphones; and that there are limited suppliers of products to support current architectures. BigRoad noted TransferJet has no encryption mechanism built into the link layer; for security, the transmission should be encrypted. Continental pointed out that the TransferJet technology is not used today in either automotive or commercial vehicle applications and should be removed from the list of options.

PeopleNet stated that TransferJet requires the purchase of additional hardware, which FMCSA did not take into consideration in the cost analysis. In addition, commenters were concerned that many suppliers would need to make modifications at the operating system level to take advantage of the new hardware. Commenters contended this solution would be prone to failure due to discrete hardware components, and increase both carrier and supplier support costs due to this sole source solution.

2. FMCSA Response

FMCSA agrees with the commenters' technical and practical concerns about both QR codes and TransferJet technology as not being viable means of transferring electronic ELD data. Therefore, today's rule does not include QR codes nor TransferJet technology as options for electronically transferring ELD data to authorized safety officials.

FF. Other Communications and Technology Options

1. Comments to the 2014 SNPRM

Garmin, J.B. Hunt, and Eclipse recommended use of Wi-Fi as an additional primary transfer option. Similar to using Bluetooth, Garmin wrote that Wi-Fi would enable the ELD to connect to the authorized safety official's device via the local area network at the inspection site. Alternatively, the Wi-Fi connection at the inspection site could be used to transfer the ELD records via Web Services. Commenters pointed out that Wi-Fi range is larger than the very short range within which Bluetooth devices communicate, and it supports higher data transfer speeds. Wi-Fi technology has the means to support the setup of security-enabled networks where users can view available devices and request a connection, or may receive an invitation to connect to another device.

Garmin recommended that an additional alternative method to consider is the transfer of ELD records using a secure digital (SD) card, that is via a microSD card and optional microSD to SD memory card adaptor. The requirements for authenticating the driver, the ELD system, and the official's hardware when using the USB 2.0 method can continue to be realized and supported.

2. FMCSA Response

FMCSA does not prohibit the use of a Wi-Fi device for intermediary transfer, but the data transfer to an authorized safety official must occur in accordance with the technical specifications. Data transfer to an authorized safety official must occur through wireless email, wireless Web services, USB 2.0, or Bluetooth. This is because implementation of another option would necessitate hardware changes for ELDs and would also increase the risks of conflicts between the regulatory options and the IT security regulations policies that FMCSA and its State partners must follow.

GG. Data Reporting During Roadside Inspections

1. Comments to the 2014 SNPRM

CHP stated that a data exchange may present cross connectivity issues when using a portable computer for ELD dataset exchange because of the threat of

computer viruses and malware, issues associated with encryption software, regional connectivity issues, operating systems compatibility, and data transfer best practices. Therefore, enforcement will continue to consist of an official physically observing the data on a device's electronic display.

Omnitracs stated that Option 1 presented in Table 5 has no backup mechanism should the printer become disabled, and all other options require two separate backup mechanisms. Inthinc recommended that the regulation state that authorized safety officials are mandated to accept whichever of the seven methods of data transfer that the ELD provider has opted to support.

EROAD recommended that FMCSA consider implementing a simple generic report format as a transition to using eRODS software. FMCSA could require the ELD solutions to generate and send enforcement data not only in a raw data format, but also in a simple generic report format—an enforcement view of the ELD data/records. This could be a secure PDF file with a small number of relevant statistics. This option will be easily implemented in the interim while States adopt eRODS software, and such a report could be viewed on any device with ability to read PDFs. Because ELDs will have the capability to send raw data, the States will always be free to adopt eRODS software and develop or procure additional software to display the information in their own way.

BigRoad stated that the only requirement is that ''an authorized safety official will specify which transfer mechanism the official will use,'' meaning that they can select any of the backup methods without supporting the primary method themselves. In particular, this could mean that although a device supports a primary mechanism such as Bluetooth, the safety official might only ever choose the backup USB 2.0 mechanism. The SNPRM provides no guidance or requirements for data transfer support on the devices used by authorized safety officials. BigRoad also stated that inspections should require that the ELD information be shown on the display of the ELD. Verigo stated that the SNPRM provided too many options. The backup method of file transfer from the ELD in CSV format should be limited to USB 2.0, QRC, or NFC. Advocates cautioned against allowing the introduction of any unnecessary intermediaries in the process of maintaining and transferring HOS data. To prevent data corruption, the Agency must require that the most recent 24 hours as well as the previous 7 days of operation be stored in the ELD for immediate transfer to officers at the roadside. Advocates acknowledged the check value calculations, but did not believe that this limited security feature will thwart determined efforts to evade compliance. Advocates recommended that the Agency establish security features, which would be shared with certified manufacturers and shielded from those subject to the HOS requirements, namely drivers, carriers, and third parties servicing those groups.

2. FMCSA Response

FMCSA believes the SNPRM presented an appropriate number of options for making the HOS data available to authorized safety officials. While various commenters had substantive technical concerns about the options, the Agency continues to believe that—with the exception of TransferJet technology and QR codes—the proposed options remain viable and cost-effective. However, FMCSA does believe that limiting the combinations of data transfer types to two types, local and telematics, and combined with a backup option, will make the data transfer to authorized safety officials clearer. FMCSA believes that today's rule's data transfer mechanism options suit the needs of many business operations of motor carriers, the daily needs of drivers, and the needs of authorized safety officials as well. Additionally, all ELDs are required to have a backup method for the authorized safety official to verify HOS compliance. FMCSA also believes that by not prescribing one specific standard, cost is kept lower and providers can provide ELDs that are able to meet the requirements of this rulemaking, including the security standards.

The Agency considered IT security concerns and the potential need for additional hardware to implement the options. FMCSA does not believe that there are concerns about cross-connectivity and security concerns about portable devices. All ELDs will meet the same minimum standards; there is no reduction in security for portable devices.

HH. Data Transfer Compliance Monitoring

1. Comments to the 2014 SNPRM

Drivewyze requested clarification on the scope of a data transfer test given that this test may occur without the presence of a receiving roadside inspection system or that the receiving system may only support a limited number of transfer mechanisms. Without a full suite of connectivity tests that cover all transfer mechanisms, there can be no confirmation of compliance beyond a test that only monitors the ability to send data, not its successful receipt by third party systems.

BigRoad stated that data transfer mechanisms are only truly verifiable when there are two endpoints to transfer between. It is unclear how either the ELD or the driver could verify transfer mechanisms without extra hardware components to act as one of the endpoints in the pair. BigRoad commented that some clarification of the extent and character of verification is needed.

Omnitracs recommended removing the self-monitoring requirement on the primary data transfer mechanism. To fully verify primary data transfer mechanisms, the ELD would require (1) two Bluetooth radios to test, transmit, and receive (in the case of Bluetooth); and (2) two USB 2.0 connections and an interconnect cable to test, transmit, and receive over the USB 2.0 connections (in the case of USB 2.0). Since there are both primary and backup transfer mechanisms, this added hardware expense and complexity is not feasible.

2. FMCSA Response

FMCSA believes the data transfer options provide a practical way to provide RODS information to authorized safety officials. It is expected that the ELD providers will be testing data transfer options before certifying their devices with FMCSA. If the authorized safety official is unable to receive or open the electronic file, this would not, in and of itself suggest that the ELD system that transmitted the file was non-compliant. The driver would then need to present the RODS information to the authorized safety official at roadside, either on a display screen or a printout. FMCSA does not remove the requirement to self-monitor.

FMCSA will use its Web site to accommodate ELD testing in support of today's rule. This site will accommodate provider registration, allow approved ELD providers to register their device with the Agency and act as single source site for: ELD registration keys, authentication keys, authentication files, data formatting and configuration details and data testing (end to end) with approved third parties. This site will also include an ELD Interface Control Document, specifically written for ELD providers and service providers.

FMCSA is currently in the development stage of modifying this site in preparation for today's rule and plans to have a registration site available and operational for ELD providers by rule's effective date.

II. Printing

1. Comments to the 2014 SNPRM

In the SNPRM, FMCSA explored options that would require a printer during roadside inspections. FMCSA also proposed to require an ELD to be able to present a graph grid of a driver's daily duty status changes—either on a display unit or on a printout—for the current 24-hour period and the previous 7 days.

Proposed section 4.10.2.4, Printout, (section 4.8.13 in the today's rule) laid out the data elements that had to be included in the printed reports for the authorized safety official at roadside. It also specified that print paper must be at least 2 inches wide and 11 inches in height, or on a roll of paper that could be torn when each individual printout was complete.

CHP recommended that ELDs possess printer capabilities. Because of agencies' encryption software, signal transmission, signal coverage, and different operating systems, CHP stated that it may be problematic to use software for ELD dataset exchange. CHP anticipated that enforcement would continue as usual, *i.e.,* an official physically observing the data on a device's electronic display or the data being faxed to an inspection facility. This limitation creates an enforcement situation that requires the official to conduct an enforcement action at a later time, once the faxes are received, or execute an enforcement action without a printout.

BigRoad stated that portable printing devices such as photo printers might use non-standard paper sizes such 4″ x 6″ or 5″ x 7″. Such printed documents would easily be as legible as the allowed 2-inch roll, but would not be at least 11 inches in height or on a roll. BigRoad believed that FMCSA should modify this requirement so that drivers are able to choose the smallest printer that is suitable for printing legible ELD records with a minimum paper width of 2 inches.

Continental stated that a 2010 survey indicated that over 50 percent of CVSA-certified inspectors did not have the equipment to receive and manage electronic files at roadside. A requirement for a printout of the HOS graph grid showing the same information contained in the paper logs is a proven, reliable, and cost-effective technical solution. Inthinc, OTA, and PeopleNet recommended that printing not be an option. PeopleNet stated that the majority of current AOBRD suppliers agree that the print option would be a significant cost to the industry and difficult to implement in a successful way, due to the environment of the vehicle.

2. FMCSA Response

Today's rule requires the ELD to be able to provide certain data elements to an authorized safety official at roadside using either a display or a printout as backup methods to the electronic transfer of data. If drivers or motor carriers want to avoid printers, they have the option to present a display that includes the data elements required by the regulation.

The specifications of paper size in the SNPRM were based upon the presence of a QR Code on the printout. Because QR codes are not an acceptable form of data transfer, FMCSA has removed the specification for minimum paper size and specified a minimum size of 6 inches by 1.5 inches for the size of the graph grid on the printout, in today's rule. For the display, FMCSA has not made specifications on font or size requirements. Today's rule requires a performance standard specifying that the display must be reasonably viewed by an authorized safety official without entering the commercial motor vehicle.

JJ. Portable ELDs

1. Comments to the 2014 SNPRM

The SNPRM did not address portability of ELDs. Many commenters addressed the possibility of allowing portable devices to serve as ELDs. Except for the safety advocacy groups, the commenters generally supported allowing the use of smartphones, tablets, or computers as ELDs.

The Limousine Association and J.J. Keller noted the prevalence of smart devices and the cost-savings involved in using them as ELDs. J.J. Keller supported the rule language as currently proposed, which allows multi-purpose devices to be mounted, with a secure e-logging application that cannot be used while the vehicle is in motion. J.J. Keller wrote that a requirement to lock the device in its entirety, however, would discourage the use of multi-purpose device technology for e-logging.

YRC stated that FMCSA should allow flexibility in the type of device used for compliance—including allowing the use of a Bluetooth device that would avoid monthly cellular charges and would use Wi-Fi networks. YRC wrote that some companies have invested heavily in a handheld device that, while not tethered to the engine, could be used to track city pickup and delivery drivers' duty status and location. Commenter stated that leveraging an existing device offers companies the opportunity to build on that investment and would limit developing entirely new back office technology, significantly drop training times, and not take trucks out of service.

The MPAA stated that the most effective solutions to enable meaningful, all-electronic RODS for production drivers, and others similarly situated, may be either: (a) A greater emphasis on truly portable ELDs that accompany drivers between vehicles and motor carriers; or (b) a more prescriptive rule that standardizes ELD inputs and outputs and methods of data transfer.

The American Pyrotechnics Association stated that, absent readily available ''plug and play'' devices that can be rented on a short-term basis, it would be extremely difficult for its members who use rentals for a very limited time each year for commercial purposes, to comply with the mandatory ELD requirements. BigRoad generally supported allowing portable devices. Verigo asked if the rule language covered netbooks and laptops. Omnitracs noted that the rule would require data that are not available unless the driver is logged onto a specific CMV. Inthinc recommended that an ELD used for oilfield equipment be ruggedized, and not just an ordinary tablet. Zonar asked how a portable device could work if it was removed from the vehicle before it was started. The Truck Renting and Leasing Association (TRALA) similarly stated that there are provisions in the rule that contradict the assertion that the devices will be truly portable. For example, proposed 49 CFR 395.26(h) would require that, when the vehicle's engine is powered up or powered down, the ELD would automatically record the data elements set out in § 395.26(b)(1) through (8). But if a device is actually portable, there is a possibility that it would not be in the vehicle, or not attached to the vehicle engine, when the vehicle was powered up. TRALA stated that the Agency should ensure that the requirement that the ELD be ''integrally connected'' to the CMV's engine does not jeopardize the portability or transferability of ELDs among vehicles and/or customers.

Generally, safety advocacy groups opposed allowing ELDs that are not wired to the engine. Commenters believed the use of portable ELDs that are not directly synchronized or connected to the vehicle engine reduces the effectiveness of the rule and the security of the system.

2. FMCSA Response

FMCSA acknowledges the safety advocates' concerns about the use of portable devices. However, the Agency has concluded that it would be

inappropriate to prohibit the use of such technology in today's rule because all ELDs will be subject to the same technical specifications in the appendix of this rule.

FMCSA relies upon a performance-based standard that allows flexibility in the market place, including the use of certain smart phones and tablets, provided they have a means of achieving integral synchronization.

In its effort to create a minimum standard that is not too expensive or complex, FMCSA has not required ELDs to be ruggedized. However, the Agency does not prohibit more durable devices for industries that may require them.

XI. Discussion Of Comments Related to Costs and Benefits

A. Cost and Analysis—General

1. Comments to the 2011 NPRM

The 2011 NPRM proposed a mandate for the use of an ''EOBR'' that met the technical specification in the 2010 EOBR rule. Under this proposal, FMCSA's recommended option would have required all motor carriers whose drivers were required to keep RODS to use EOBRs, subject to a limited exception for drivers requiring RODS no more than 2 days in any 7-day period. The NPRM, however, analyzed several options comparing them to the current HOS regulations as well as the then proposed HOS rule. The net benefits ranged from $418 million to $891 million.

Many commenters stated that the industry has had many financial challenges recently, and could not handle an added expense. Commenters also stated that the CMV industry has seen dramatic increases in safety and therefore did not need the stress of what they perceived as a costly rule. Referring to the new costs on the industry, OOIDA called the proposal the ''proverbial straw that breaks the camel's back.''

Several commenters to Regulation Room had concerns about the cost to upgrade their equipment. Commenters predicted costs being passed on to consumers, drivers losing income and work, and the costs for goods being driven up, ultimately hurting the economy. Other commenters raised concerns about financial inequality and said that the proposal was lacking because it relied on a ''one-size fits all'' model. An OOIDA member said that there would be a decrease in service quality. A commenter stated that the Cost Benefit Analysis should be re-calculated on a true EOBR, not a technology that incorporates functions of an FMS.

Some commenters had questions about who would pay for the EOBR if the driver were an owner-operator, or owned the CMV and worked for a motor carrier. OOIDA stated that some motor carriers require the use of their systems and take payment for this use from the owner-operators' paychecks; OOIDA believed the drivers are being over-charged for the use. OOIDA believed this made owner-operators function more like employees of a motor carrier as they would be connected to a specific system.

2. Comments to the SNPRM

The 2014 SNPRM proposed a new technical standard for ELDs. It addressed concerns of harassment through both technical specifications and procedural requirements and prohibited a motor carrier from engaging in harassment as defined in the proposed rule. It kept the same population of RODS users that would need to transition to ELD use as was included in the NPRM, subject to a limited exception for drivers requiring RODS no more than 8 days in any 30-day period. This SNPRM analyzed several options within the proposal, resulting in annualized net benefits from negative $355.5 million to positive $493.9 million.

Most of the commenters on this issue disputed some aspect of the analysis and its assumptions. OOIDA noted that the statute is silent regarding who will bear the burden of paying for mandatory ELD use—the driver or the motor carrier. If the burden is placed on owner-operator drivers or small fleet owners, OOIDA believed that the cost poses a very heavy burden. For owner-operators, any additional financial burden may make their continuation in the trucking business impossible. OOIDA stated that a cost-benefit analysis that does not address the crucial question of what type of organization will shoulder the burden of these costs cannot support a reasoned regulatory judgment. OOIDA also commented that FMCSA states, without support and unrealistically, that financing for the equipment costs will be available in the market. However, this is conditioned on ''if the carrier has good credit.''

The AGC stated that, while FMCSA regulations apply only to interstate operations, most States will follow suit and adopt the rules for intrastate operations. If States adopt this rule, ELDs will be required in almost all vehicles with a rating of 10,001 pounds or more, which includes 1-ton pickups and 1-ton and up work trucks. Requiring the drivers of these vehicles to use an ELD creates an undue financial burden on the motor carrier. Commenter believed the cost of purchasing the devices, installation, monthly service fees, and driver training would be excessive. These costs would be incurred for all vehicles even though logging would only be required in limited circumstances.

The California Construction Trucking Association questioned FMCSA's cost-benefit analysis as well as the estimates of CMVs and drivers that will ultimately be covered by this rule. Commenter wrote that FMCSA has calculated tens of millions of hours in savings attributable to drivers no longer needing to complete paper RODS, despite FMCSA being aware that the majority of drivers are not compensated for ODND time. The commenter believed that while some calculated time savings may be present—especially on the fleet management side of the equation—assigning a dollar value to the time drivers spend completing paperwork is an example of government manipulating data to justify a regulation.

NPGA stated that the cost impact from an ELD mandate, particularly for those who have demonstrated an excellent safety record, does not justify the benefits. Moreover, the commenter stated that it is not clear there is any correlation between the use of ELDs and a decrease in CMV crashes. It cited the decline in crashes between 2004 and 2008 as an indication that trucking was becoming safer absent ELDs, as well as the safety record under waivers during the winter of 2013–14.

For small business less-than-truckload (LTL) carriers, the NMFTA stated that the proposed ELD rule will require the additional cost of hiring more personnel to manage and maintain new information systems equipment and software. LTL small businesses are concerned that they do not have the financial wherewithal to comply with such obligations. The association stated that the cost/benefit assessment weighs against the application of the rule over a much broader segment of short-haul operations than acknowledged by FMCSA in the proposed rule.

3. FMCSA Response

FMCSA emphasizes that this rulemaking does not differ from other rulemakings the Agency has undertaken with regard to industry compliance costs and how costs are accounted for in business relationships between motor carriers and any independent drivers working for them under a contract. The task before the Agency is to move forward with a safety regulation requiring the use of ELDs while leaving

to the private sector the contractual arrangements necessary to address the costs for purchasing, installing and maintaining the ELDs. The calculation of the cost benefit analysis does not take into account who bears the cost of ELD purchase and installation. In the case of carriers that require that their subcontractors use a particular ELD system, FMCSA also leaves it to the market to determine how these costs are shared between companies and drivers through their contractual agreements.

We note, however, that to the extent carriers that purchase ELDs in large numbers receive volume-related discounts from the provider, those savings might be passed along to independent drivers who may assume some or all of the purchase cost.

In today's rule, FMCSA requires a device that needs to perform only minimal HOS recording functions. There are several technical requirements focusing on the concern of driver harassment by motor carriers. While the standards allow manufacturers to develop and motor carriers to use an FMS with additional features and functions, the technical specifications included in today's rule allow the market to develop a compliant device at a low cost. FMCSA used currently available devices, whose functions are similar to the minimal requirements in the rule, to determine costs and benefits. There is no support for the rulemaking's more expansive impact on the industry, on the economy, or on service that some commenters suggested.

Interstate CMV drivers and a subset of intrastate CMV drivers are subject to FMCSA HOS regulations in 49 CFR part 395. Although FMCSA only has the statutory authority to directly regulate interstate CMVs, States must adopt compatible regulations as a condition of Federal MCSAP funding. This rule will only impose the ELD requirement on interstate CMV drivers currently required to keep RODS; however, intrastate drivers indirectly affected were included in the final rule analysis of cost and benefits because they will be required to comply with compatible State rules. There is nothing in this ELD rule that requires States to extend the ELD requirement beyond motor carriers already required to retain RODS.

For purposes of assessing the value of the driver's time savings as a result of this rule, FMCSA assumes that a driver's time is valuable whether or not that driver receives an hourly wage for their time. In the rule, we value the time when the driver should be on duty at an hourly wage rate for his or her time, excluding benefits. This is common practice in Federal cost benefit analyses.

FMCSA does not believe that small businesses will have to add personnel to manage their ELDs, and the requirements for motor carriers to manage their drivers' time have not changed with this rulemaking. The basic ELD performs minimal HOS recording functions. Adoption of this automated process will result in simplified HOS compliance management.

B. Costs Associated With ELDs

1. Comments to the 2011 NPRM

Based on extensive research and modeling, the NPRM assumed that ''[t]he annualized cost for a motor carrier that does not currently use an FMS or other 'EOBR-read' system ranges from $525 to $785 per power unit (PU).''

A number of commenters, including OOIDA, maintained that EOBRs are costly, do not benefit the trucking community, and have no practical or safety application. Other commenters questioned if the cost is commensurate with the benefits from the use of the EOBR by carriers with a strong safety record. One commenter said that the use of the EOBR provides FMCSA with data, but provides minimal benefit to the carrier. Another commenter said that any data collection by EOBRs, other than what is strictly required by HOS compliance, is an unnecessary expense and a burden on small business owners. This commenter also said that any savings to truckers from collecting other information should not be included in DOT's cost-benefit estimates. Commenters believed that EOBRs might provide large motor carriers a financial advantage over small carriers and owner-operators.

A number of commenters, including trade associations and carriers, provided specific information on the costs of an EOBR or implementing an EOBR mandate for their company or industry. J.B. Hunt stated that it thought there was opportunity for the devices to become increasingly affordable, while staying in compliance with the requirements of the 2011 NPRM. Another commenter stated that EOBRs are not financially burdensome, and models exist that do not have real-time components. The National Association of Chemical Distributors, however, was concerned that there would not be sufficient EOBRs available, which would drive the cost up. Some commenters provided reasons for using an EOBR, including improvements in HOS compliance. Knight said, ''if you are a fleet or an operator who does not comply with the HOS rules, it is true that investing in a system to electronically monitor logs will cost you greater than to not comply using paper RODS.''

Multiple commenters stated that the cost of the EOBR used in the cost benefit analysis was overestimated, as the market for EOBRs is broader than FMCSA considered in the NPRM. They maintained that the market will expand once there is a mandate, further driving down costs. One said that ''it is probable that FMS vendors will offer a logs-only solution,'' thus reducing the cost dramatically. ATA believed that the proposed rule did not require an investment beyond a basic system.

A commenter criticized the cost estimates used, saying that they were too generalized, and did not account for the budget or size of the motor carrier. A number of commenters stated that the hourly rates used were too high. Another commenter stated that the useful life of an EOBR should be about 3 years. Many commenters compared the cost of purchasing an EOBR to the cost of a paper log book, which they estimated to be less than $10 per month. Other commenters stated that the cost of an EOBR would be less than the cost of other common equipment on CMVs, like stereos or citizen's band radios.

OOIDA thought that including fleet management systems with EOBR functions in the analysis was ''simply incorrect'' as the fleet management systems do not necessarily incorporate the EOBR function. OOIDA also thought FMCSA's estimates of repair costs were too low.

2. Comments to the SNPRM

In the SNPRM, FMCSA took a very conservative approach to the cost of an ELD. It analyzed the Mobile Computing Platform 50, a higher-end FMS, and included installation, hardware costs, and monthly fees. However, by relying on performance standards and prescribing minimal requirements, FMCSA allowed for use of a basic ELD that would satisfy the rule. The SNPRM estimated an average cost of $495 per CMV on an annualized basis where the range is from $165 to $832 per CMV on an annualized basis. In the SNPRM, FMCSA analyzed a range of devices, the most expensive one being $1,675 and the least expensive provided for free as part of a monthly service agreement.

FMCSA found that time savings to drivers and carriers from filling out, submitting, and handling paper can exceed these annualized costs. FMCSA estimated that 4.6 million inter- and intra-state drivers were subject to HOS and 3.1 million were required to keep RODs.

A carrier estimated the cost to install, maintain, monitor, and replace ELDs at

over $100,000 per year for its 200 trucks. This did not include the cost of employee's downtime when the ELD is not working, the penalties, and inactivity at the job site because the load does not make it. The Association of Independent Property Brokers and Agents stated that its research indicates that there are options available that range from a reasonable, one-time fee of a few hundred dollars to an even smaller set up fee with a reasonable monthly fee equal to a basic cellular phone service bill. It doubted that a few hundred dollars increase in truckers' costs would have a significant impact.

The ABA stated that the SNPRM does not account for all of the costs that bus operators will bear with the implementation of the ELD rule. The commenter wrote that bus operators are required to pay separate charges for monitoring the ELD system and a per-driver fee for the system. Even small operators are obligated to pay a $25 monthly service charge and a $25 per-driver fee. The ABA commented that all bus operators will have to add staff to ensure that the operator is in compliance with the rule. The ABA predicted that costs will mount each year.

AGC stated that purchase and installation of ELDs will be far more expensive than retaining paper RODs; anecdotal accounts from a sampling of members who have researched the costs suggested that FMCSA estimates fall short of the actual costs. While the costs of the devices themselves would be significant, the commenter believed that additional overhead would increase costs significantly. AGC wrote that FMCSA's estimates do not appear to include the additional costs for data plans, training, programming, and support. Because there tends to be substantial turnover of drivers in the construction industry, AGC held that the training costs alone will be significant.

The NPGA estimated, based on FMCSA's figures, that the startup costs of purchase and installation alone would approach $8 million for the 9,000 trucks in their industry. For the propane industry, regular monitoring would add another $180,000 annually; even if three-fourths of the drivers of the 9,000 transport trucks needed training, it would cost the industry nearly $122,000. The commenter wrote that not all motor carriers, particularly those considered small businesses, possess the type of technology needed to comply with the ELD mandate. Those who do not would also incur significant startup costs for purchasing new computers, file servers, etc. Continental believed that the ELD mandate will increase the market from 50,000 units per year to around 3 million units in the mandate year and will attract additional suppliers and competition. This will bring costs down. In addition, Continental commented that the truck and bus manufacturers will offer ELDs as a standard product, further lowering the costs of acquisition and installation of the systems. Based on its experience in other countries, Continental wrote that highly tamper resistant ELDs can be made available to motor carriers for less than $500 per unit, while ELDs with an integrated thermal printer are already available for purchase in the United States for $500. It criticized FMCSA for including in its estimated operating costs of $25 in monthly fees per ELD (for wireless data extraction) since FMCSA does not require that ELDs include wireless communication technology. Continental wrote it is inappropriate to factor in costs related to features that are not required by the rule, thus, monthly fees should be excluded from the cost calculation. Similarly, a safety group noted that over 90 percent of carriers operate with six or fewer power units, yet FMCSA included the yearly cost for adding electronic HOS monitoring to an FMS. Only the larger carriers will use an FMS and most of them already pay for HOS electronic monitoring. Since this cost will only be assumed by a very small percentage of carriers, the commenter wrote it should not be added as a general cost of ELD yearly use.

Verigo stated that the annual record keeping costs for motor carrier clerical staff of $120 per driver to handle and file RODS does not appear to include any allowance for the appropriate validation, measurement, and management practices to determine ongoing compliance of drivers. Verigo commented that examples for proper HOS compliance management taken from industry best practices and carrier excellence programs indicate a higher cost than reported in the proposal. Conversely, business case studies following the implementation of electronic log management systems have consistently revealed the cost of compliance management, including truck mounted data terminal hardware, to be 30 percent lower than manual compliance management procedures used for paper logs.

A number of commenters compared the very low cost of purchasing paper logbooks to the cost of ELDs. They provided a wide range of estimates for ELD implementation, from about $800 to $6,000 per truck. A commenter believed that FMCSA's estimate does not account for the initial cost of set-up, including iPhones/tablets and activation fees. A driver believed that the economic factor will drive a large percentage of owner/operators out of business or they will sacrifice maintenance to meet these regulation costs. The driver wrote that the cost of ELD repairs included in the costs, and the economic impact of necessary equipment for enforcement personnel has only been ''loosely'' estimated.

Knight stated that opponents' argument that the cost of using an ELD is higher than using a paper log is not the proper way to frame the issue and is intentionally misleading. The question must not be purely about the cost to complete a log; it must be about the cost to comply with the rules. For a fleet to assure a level of compliance using paper logs commensurate with the level of compliance assured by use of an ELD, Knight commented, ''it does and would cost much more to use a paper log.'' To assure compliance, the commenter wrote that a carrier must invest considerable resources to collect the logs, the supporting documents, and then to audit them against each other. The ELD automates the collection of logs and the auditing of driving activity. It is that automation that makes the ELD more cost effective to fleets. Knight wrote that a paper log is less costly than an ELD only when you do not invest the necessary resources to audit those paper logs, especially against reliable vehicle position history, which is only possible with some form of telematics/GPS technology on the truck. It noted that, even for the owner-operator, there is a cost benefit associated with the ELD.

Advocates questioned whether the cost to the industry represented by coming into compliance with the law should be included in these calculations. It stated that the industry is already required to comply with HOS requirements and has been for many years. The costs associated with HOS compliance are costs that should have been borne by the industry regardless of the ELD requirement. Advocates held that the cost side of the cost-benefit analysis for this rule should not be encumbered simply because some in the industry have, for decades, violated the HOS rules, and will now be forced to act responsibly and in compliance with long established rules of conduct.

Advocates also stated that FMCSA must reconsider the justification for including in the cost estimates for the ELD both the unquantified costs to a limited number of motor carriers that have FMS with no electronic HOS monitoring, as well as the highly overstated printer cost. Advocates

believed that those cost figures must be substantially reduced in accordance with the realistic use by multi-vehicle fleets and current pricing for inexpensive printer equipment. The failure to reflect more realistic cost estimates has led the Agency to conclude that certain options are not cost beneficial and therefore underestimate the net benefits of all the options presented in the SNPRM.

The UMA stated that FMCSA should include in the cost analysis the adverse effects this rulemaking has on new equipment acquisition and fleet modernization. It commented that keeping passengers in older motorcoaches and compelling groups to use alternative vehicles, such as private passenger automobiles and vans, could delay the desired results and potentially increase fatalities. The George Washington University Regulatory Study Center wrote that FMCSA should consider the effect of the SNPRM on driver compensation and small carriers.

OOIDA stated that FMCSA greatly underestimates the cost of the regulations, taking into account driver and equipment turnover. If a driver buys a new truck, OOIDA wrote, he or she will have to buy a new ELD or pay to transfer his existing unit. If a driver moves to another carrier, the driver will have to modify equipment to meet the requirements of a new carrier.

OOIDA questioned FMCSA assumptions on cost savings. It stated that logs will still need to be checked and stored. More personnel may have to be added to interpret new information from the ECM and GPS synchronization, to maintain the equipment and software, and perform repairs and software updates.

OOIDA stated that, according to FMCSA statistics, driving past the 11th hour accounted for only 0.9 percent of HOS violations in 2009. If the automatic detection of the 11-hour violation is an ELD's only compliance and enforcement advantage over paper logbooks, this should be the starting point for any benefit calculation of ELDs. OOIDA commented, however, that FMCSA assumes, without explanation or support, a far greater level of benefits for HOS compliance through ELDs. OOIDA believed that FMCSA should acknowledge the limited capability of ELDs and measure the safety benefits to be derived from that limited capacity. If the Agency performed such an analysis, it would be clear that the costs of ELDs in economic, privacy, and safety terms far outweigh whatever marginal benefits are identified.

Both OOIDA and the California Construction Trucking Association criticized the Agency's estimate of the total number of CMV operators who would be affected by the rule, noting that FMCSA had reduced its estimates of affected drivers. The California Trucking Association believed that FMCSA's analysis had given ''little thought to the totality of CMVs operated beyond freight hauling operations.''

OOIDA claimed that FMCSA based its cost benefit analysis on an estimate of 4.3 million drivers in FMCSA-regulated operations. However, OOIDA wrote that, in the ICR for the HOS rule (79 FR 35843–44 (June 24, 2014)), the Agency lowered the number of drivers covered under the HOS rules from 4.6 million to 2.84 million—a reduction of 38 percent—and estimated that 10 percent of those drivers currently use electronic HOS technology.

3. FMCSA Response

In today's rule FMCSA estimates the annualized cost for an ELD that must support one of two options for electronic transfer. The first option is a telematics type ELD. We estimate a total annualized cost of $419 for an ELD with telematics. The RIA prepared for the SNPRM assumed an annualized device cost of $495, which FMCSA acknowledged was on the high end of the range of costs of existing units. The $495 figure cited by OOIDA is therefore no longer relied upon by the Agency. The reduction in the estimated annualized cost for an ELD with telematics, from $495 to $419, is largely attributable to the reduction in purchase price of the device from $799 to $500. The second option is a local transfer method type ELD (ELD with USB 2.0 and Bluetooth). The estimated annualized cost of an ELD with USB 2.0 and Bluetooth is $166. The lower price of these units is a reflection of their limited FMS functionality rather than a decline in either the manufacturing or component costs. For estimating the cost of the final rule, the Agency conservatively assumed that drivers would purchase an ELD with telematics, however the Agency did reduce the baseline price estimate of these units to reflect the market trend towards more basic FMS designed primarily for ELD functionality.

Although we do not specifically account for the cost of ''driver turnover'' as described by OOIDA, the RIA for the final rule does factor in the cost of installing, removing, and repairing ELDs. The Agency notes that some independent drivers will have the option to purchase a portable ELD, which fall at the lower end of the price range and which typically can be removed and reinstalled in less than 30 minutes. In addition, to the extent that OOIDA's comments concerning driver turnover costs are based on the premise that drivers will always be financially responsible for the purchase and installation of ELDs, we note that OOIDA did not identify the source of its information underlying this assumption, nor is the Agency aware of any data that could be reviewed independently to validate the claims.

FMCSA made an effort to consider, and reduce, the costs of overhead. Because the technical requirements of this final rule have been changed, there is no longer a requirement to use any wireless communication capabilities (*e.g.,* telematics or email), eliminating this monthly cost. These basic ELDs do not require monitoring, data plans, or programming support; FMCSA has reduced the cost of ELDs to reflect that. FMCSA has considered the cost of repair, fleet modernization, and useful life in its cost analysis.

As explained in the RIA, the use of ELDs will significantly reduce the paperwork and recordkeeping burden associated with the HOS regulations. Drivers' time spent completing RODS and forwarding RODS to their employers while away from the motor carriers' terminals will be reduced by $558 and $65, respectively. Further, the RIA estimates that the savings in clerical time spent retaining paper RODS and eliminating the need to purchase paper log books is $144 and $42, respectively. This amounts to a total annual paperwork savings of $809 per driver.

The rule does not mandate specific training requirements for drivers in connection with ELDs. While the RIA includes training costs for drivers, these are not anticipated to be different from existing training related to paper RODS. New drivers currently need to be trained on paper RODS instead of ELDs. FMCSA expects that motor carriers will continue to monitor their drivers' records for compliance with HOS. Additionally, there is no real-time requirement, and much of this could be done electronically. Further, electronic records are less expensive, and take less time to manage, compared to paper RODS.

Some ELDs are portable and can be transferred between vehicles. For example, one of the least expensive devices on the market, Continental's VDO Roadlog which costs $500 and does not require monthly fees, can be simply unplugged from the ECM from one CMV and plugged into the ECM of another CMV. A permanently installed ELD can be sold or purchased with the CMV it is installed in and reflected in the sale price for the vehicle.

Additionally, as Continental pointed out in a comment, some manufacturers might start offering ELDs as a standard feature.

The assertion of some commenters that the Agency reduced the number of CMV drivers affected by the rule is incorrect. In fact, the number of CMV drivers subject to the rule increased from 2.8 million, the number cited in the SNPRM, to 3.4 million in today's rule. The increase is primarily due to the inclusion of intrastate long-haul drivers subject to RODS, which we added due to the likelihood of state-level adoption of similar requirements in order to obtain MCSAP funding. The basis for determining the number of CMV drivers impacted by the rule is further explained in the Agency's discussion of the Paperwork Reduction Act in Section XIV, J, of today's rule.

The Agency rejects OOIDA's premise that the automatic detection of the 11 hour violation is the ELD's only enforcement and compliance advantage over paper log books.[26] FMCSA's Roadside Intervention Model, described in Appendix E of the RIA to this rule, directly measures the relationship between crashes and violations using roadside inspection, traffic enforcement, and safety data. This model represents a major improvement in the Agency's estimates of the safety benefits of ELD use.

C. Cost and Analysis—Updating Existing Systems

1. Comments on the 2011 NPRM

The NPRM proposed a 3-year compliance date and a 3-year grandfathering period for devices meeting the standards of 49 CFR 395.15 that could not be updated to meet the new (now vacated) standard in § 395.16. The NPRM assumed a cost of $92 to update an existing device to be compliant with those specifications.

Though UPS voiced support for the EOBR mandate, it also ''estimates that the total cost of bringing . . . [its] fleets into compliance with the proposed rule would be approximately $25,520,000. In addition, UPS would need to incur the costs to install ELDs in new units it purchases that are manufactured after June 1, 2012.'' Werner stated that under the rule as proposed, carriers who voluntarily complied with the April 2010 rule lose the benefit of having complied early.

2. Comments to the SNPRM

In the RIA for the SNPRM, FMCSA estimated that the FMS upgrade would be significantly cheaper than the purchase of any new device. FMCSA estimated annualized costs to all voluntary adopters of AOBRD systems to upgrade their systems: $174 per CMV to add electronic HOS monitoring services to FMS that have this capability. Some carriers that have already adopted AOBRDs would have to replace their older devices 2 years after the effective date of the final rule. FMCSA estimates that the annualized cost of replacing an older AOBRD is $106 per unit.

PeopleNet agreed with FMCSA's assessment and, based on the details provided in the SNPRM, agreed that only software updates would need to be made on the majority of the deployed devices. This would include those manufactured before 2010 as well as those manufactured after.

3. FMCSA Response

The RIA prepared for today's rule estimates the annualized cost of replacing existing devices will be between $93 per device for FMS upgrades and $128 per device for AOBRD replacements. Because FMCSA carefully studied the industry and looked at several devices representing a significant fraction of the AOBRDs in use, the Agency thinks that the majority of FMS devices that exist today could easily meet the minimum specifications of this rule with relatively inexpensive upgrades. Information materials from many providers indicate that ELD functionality is available for their FMS. FMCSA based the estimated cost to add the functionality, which it used in the RIA, on real price data from providers.

D. Paperwork Analysis

1. Comments to the 2011 NPRM

The proposed rule would not have required additional reporting, recordkeeping, or other paperwork-related compliance requirements beyond those already required in the existing regulations. In fact, the NPRM was estimated to result in paperwork savings, particularly from the elimination of paper RODS. Compared to paper RODS, drivers could have completed, reviewed, and submitted EOBR records more rapidly. Furthermore, motor carriers would have experienced compensatory time-saving and administrative efficiencies as a result of using EOBR records in place of paper RODS. The level of savings would have varied with the size of the carrier implementing the systems (larger carriers generally experience greater savings).

In the NPRM, FMCSA estimated annual recordkeeping cost savings from the proposed rule of about $688 per driver. This was comprised of $486 for a reduction in time drivers spend completing paper RODS and $56 submitting those RODS to their employers; $116 for motor carrier staff to handle and file the RODS; and $30 for elimination of expenditures on blank paper RODS for drivers.

One trade association stated that the reasonable cost stipulation in the HMTAA would not be met, and that the rule would cost over 1 billion dollars. A commenter believed that the paperwork savings estimate is ''fictitious'' and inflated. This commenter stated that large fleets getting this advantage are already using EOBRs, but they will have to purchase new equipment to fit the new EOBR requirements, and small fleets ''will see nothing but increased cost and no savings.''

The Specialized Carriers and Rigging Association believed the EOBR costs to be so large that they would not be offset by paperwork reductions. Other commenters wrote that that the paperwork benefits of the rule would not be realized because some drivers would keep a paper log despite it not being required. A motor carrier said that the rule increased the paperwork burden due to the requirement to monitor supporting documents and HOS compliance, cost of the EOBR, cost of potential violations of not maintaining a system, and the requirement to submit documents within 3 days.

2. Comments to the SNPRM

The Paperwork Reduction Act analysis presented in the SNPRM was similar to that in the NPRM. FMCSA still assumed that under HOS regulations, most CMV drivers would be required to fill out RODS for every 24-hour period. The remaining population of CMV drivers would be required to fill out time cards at their workplace (reporting location). Motor carriers must retain the RODS (or timecards, if used) for 6 months. FMCSA estimated the annual recordkeeping cost savings from the proposed rule to be about $705 per driver. This would comprise $487 for a reduction in time drivers spend

[26] OOIDA's assertion that, according to FMCSA data, driving past the 11th hour accounted for only 0.9 percent of HOS violations in 2009 is incorrect. In fact, FMCSA stated that 11th hour violations are present in around 0.9 percent of total driver inspections. The rate of out of service violations for any reason related to HOS was about 5.8 percent in 2009, which implies that 11th hour violations were present in 16 percent of inspections in which there was an out of service order due to HOS (0.9/5.8). Other data consistently indicate that 11th hour rule violations are a significant reason for HOS out of service violations. Therefore, the Agency reasonably expects that ELDs will have a significant impact on reducing these violations.

completing paper RODS and $56 submitting those RODS to their employers; $120 for motor carrier clerical staff to handle and file the RODS; and $42 for elimination of expenditures on blank paper RODS for drivers.

The George Washington University Regulatory Study Center stated that, according to the ICR submitted to OMB, the transition from paper RODS to ELDs will reduce the time spent complying with the HOS regulations by 68.33 million hours per year. The commenter maintained that FMCSA should commit to gathering data to evaluate whether these predicted time savings materialize, either through a representative survey of drivers and carriers, or by encouraging feedback under the Paperwork Reduction Act .

Greyhound noted that this is the third rulemaking within the last few months in which FMCSA proposes to impose substantial new recordkeeping requirements on passenger motor carriers. The other two were the Lease and Interchange of Vehicles: Motor Carriers of Passengers NPRM and the Commercial Driver's License Drug and Alcohol Clearinghouse NPRM. Greyhound suggested ways to reduce the recordkeeping burdens of the proposals so that passenger carriers can keep an operational focus.

FedEx did not believe that the supporting documents rule would create any paperwork relief. FedEx believed the proposed rule is burdensome and that the new requirement that carriers retain 10 supporting documents far outweighs the reduction of one paper RODS per day. For a carrier like FedEx Ground, the proposed supporting documents rule would generate at least 80,000 documents per day (assuming that the carrier collects 10 supporting documents for each driver's 24-hour day). Over the course of 1 year, the carrier would need to collect, review, and file approximately 29 million documents. FedEx wrote that carriers will also be required to implement new systems to store a potentially large number of documents so that they can be ''effectively matched'' to the corresponding driver's HOS records. FedEx asked FMCSA to address what motor carriers should do with a driver's reconstructed logs if the ELD is repaired and the original logs are retrieved from the device. FedEx suggested that only the ELD-created logs should be retained if they can be retrieved from the device or ELD provider.

Unless an ELD is required, Knight stated that a driver may not understand that he or she is saving the 10–15 minutes a day spent filling out the paper log. With a paper log, there really are not HOS limits for that kind of operator/operation.

ATA stated that, as a result of the illusory document cap and the unnecessary burdens of proving mid-shift ODND time, it is not surprising that FMCSA does not expect this rulemaking to produce a reduction in the overall document collection and retention burden. ATA writes that this is at odds with the intent of the HMTAA. Since the passage of HMTAA in 1994, FMCSA has maintained a broad view of what constitutes a supporting document and thus continued to impose an unusual and uncustomary burden on the trucking industry.

A carrier, which mistakenly believed that the paperwork reduction was the result of the reduced number supporting documents, noted that the SNPRM states a paperwork reduction in one section, and then lists required supporting documents that must be retained in another. Commenter wrote that government agencies require carriers to keep all documentation for IFTA, the International Registration Plan, the Internal Revenue Service, etc.; therefore, it believed that there is no reduction of paperwork overall.

3. FMCSA Response

FMCSA believes that this rulemaking meets the HMTAA's ''reasonable cost'' standard for HOS supporting documents. Almost all AOBRDs and ELDs electronically transmit log data. This eliminates a source of burden associated with drivers and carrier staff handling paper records, and eliminates the cost of the paper. ELDs automate many of the steps needed to make RODS entries, thereby saving time. On a daily, per-driver basis, these savings may seem small, but multiplied by the number of drivers that would be required to use ELDs over the course of a year, the savings are significant. In today's rule, FMCSA extends the period that a driver has to submit records to a motor carrier; both RODS and supporting documents are to be submitted within 13 days.

FMCSA clarifies that any ELD data that has been reconstructed is a part of the HOS records and must be retained as part of the record.

Neither the NPRM nor the SNPRM claimed any paperwork reduction benefit related to supporting documents. The Agency understands that supporting documents are kept in the ordinary course of business for purposes other than satisfying FMCSA's regulations. The removal of the requirement to retain paper RODS, which will no longer be required for ELD users, will lead to a reduction in paperwork.

FMCSA recognizes that short-haul drivers exempt from keeping RODS would get none of these savings. MAP–21 mandates the installation of ELDs for CMV drivers required to use RODS. FMCSA's preferred option, adopted in today's rule, is consistent with the statutory mandate and maximizes paperwork savings.

Although not all drivers are paid by the hour, their time does have value, and their time saved has value. It is common practice for benefit/cost analyses to value either time savings or delays for individuals in terms of an hourly wage rate. The hourly wage a person requires to work reflects the value they place on their time.

FMCSA notes that the obligation on a motor carrier to monitor its drivers' compliance with HOS is not new. (See *In the Matter of Stricklin Trucking Co., Inc., Order on Reconsideration* (March 20, 2012)).[27]

E. Small Business

1. Comments to the 2011 NPRM

The Agency examined its registration data and found that 96 percent of, or just over 19,000, interstate passenger carriers have 47 power units or fewer. The 2011 NPRM did not propose any exclusions or exceptions based upon business size. However, the Agency did request comment on a possible phased-in compliance date to help small businesses.

OOIDA commented that 2011 NPRM RIA made assumptions about the safety practices of large carriers. OOIDA commented that small businesses could not realize any reduction in cost, as paperwork is not considered to be a source of cost, since their only revenue is from operating. Since many drivers are not paid by the hour, OOIDA believed that the analysis in the RIA should not use hourly estimates of the value of their time. OOIDA also stated that because many drivers or motor carriers may not trust EOBRs, they might keep manual logs anyway, which would mean no paperwork savings. OOIDA thought that FMCSA had not included an explanation of benefits in the 2011 NPRM.

Though they support the objective of this rule, AMSA stated that it is too much of a burden on their segment of the industry. Commenters to Regulation Room stated that the cost benefit analysis included savings for the reduction of clerical costs, but small

[27] Available in Docket FMCSA–2011–0127, *http://www.regulations.gov* (Document No. FMCSA–2011–0127–0013).

businesses would not realize those costs. A carrier stated that compliance costs are two to three times as expensive for the small firms. Some commenters also stated that small businesses would not see a return on investment like larger businesses would. Several commenters suggested that the rule should apply only to carriers with a threshold number of power units. Other commenters stated that there should be a waiver process for small businesses to be exempted from the rule.

The NFIB said that this was a punitive measure for small business, impacting them disproportionately. This organization suggested an exception for vehicles based on weight that they thought would benefit local service vehicles used by small plumbers, electricians, and other service providers.

2. Comments to the SNPRM

FMCSA did not re-analyze a phased-in compliance date in the SNPRM. MAP–21 requires a 2 year compliance date following publication of the rule. The Agency did, however, increase its commitment to outreach among small businesses. As stated in the SNPRM, ''[t]he Agency recognizes that small businesses may need additional information and guidance in order to comply with the proposed regulation. To improve their understanding of the proposal and any rulemaking that would result from it, FMCSA proposes to conduct outreach aimed specifically at small businesses. . . . [The] purpose would be to describe in plain language the compliance and reporting requirements so they are clear and readily understood by the small entities that would be affected.'' (79 FR 17683, Mar. 28, 2014)

ABA characterized the bus industry as small, generally family owned, and without the financial resources to undertake a major addition to their equipment. Taking the average ABA member's equipment roster as a guide, the commenter believed that this proposal would add approximately $6,600 to the cost of a small business operating a bus company.

At a June 2014 meeting of ABA's Bus Industry Safety Council, the question was asked of approximately 100 bus operators: How many operators have ELDs on their coaches? About 10 operators did. Assuming that the percentage of operators with ELDs is the same industry-wide, only 10 percent of the industry uses ELDs. ELD-use is confined to the larger bus operators, those operators who need many ELDs for their buses and whose purchasing power will allow them to take delivery of ELDs faster than smaller operators.

ABA believed that the majority of bus operators seeking ELDs will be the smaller bus operators. They will be able to obtain ELDs only after the larger, more financially able carriers receive them. ABA believed that the prices of ELDs, particularly for smaller operators with little purchasing power, are more likely to rise rather than fall.

3. FMCSA Response

Because the majority of regulated entities are considered small businesses, FMCSA did not propose a special waiver process, a threshold for usage based upon size of the motor carrier, or a blanket exception for small businesses. FMCSA believes that there are benefits to be realized from this rule for businesses of all sizes, and, as with most technology, new uses and abilities will continue to emerge to fit the needs of the end users.

F. Cost of a Printer

1. Comments to the 2011 NPRM

The 2011 NPRM did not propose or analyze the cost of an ELD with a printer.

2. Comments to the SNPRM

The 2014 SNPRM analyzed options for ELDs that included a mandatory printer. FMCSA sought comment on the feasibility and accuracy of the benefit and cost estimates associated with this requirement. The requirement for printers with each ELD would increase ELD costs by about 40 percent. One of the two ELD-like devices that the Agency considered as baseline devices offers the printer function.

Advocates stated that FMCSA erred in its estimate of how much a printer would increase ELD costs. It identified a recent article that cites a basic ELD with an integrated printer retailing at a total combined cost to an owner-operator of approximately $600. Advocates wrote that similarly low ELD-plus-printer costs, as well as low-cost thermal printers that are commonly found in taxi cabs and in hand-held portable devices used in restaurants and elsewhere, can readily be found by contacting suppliers and on the Internet. Advocates held that it is likely that some models could meet performance requirements for use in ELD-equipped CMVs at a far lower cost than the Agency used in its estimate for the SNPRM.

Other commenters, including ATA, PeopleNet, and J.B. Hunt, were concerned with the costs associated with requiring a printer. To survive in the environment of a truck cab, an external printer would need to be ''ruggedized.'' PeopleNet and J.B. Hunt anticipated that printers would be stolen unless they are built-into the vehicle. The commenters believed that maintaining and storing operational supplies for the printer would be difficult and an added cost.

ATA noted that the vast majority of manufacturers do not market a device with internal printing capability; to offer it would require redesigning their hardware. In addition to adding cost, ATA believed that requiring paper printers would put a chilling effect on voluntary ELD adoption in advance of an industry-wide mandate. If FMCSA were to require all devices to be capable of producing paper printouts, the ''software upgrade'' claims for existing systems would no longer be true and those using such devices would find themselves holding obsolete hardware. ATA understood law enforcement's interest in facilitating roadside verification of HOS compliance. However, it asked if it makes more sense to impose a prescriptive data transfer requirement on close to 3,000,000 CMVs and drivers, or to require that approximately 13,000 certified CMV enforcement officials have the means to accept records electronically by one of several required options.

To assess the cost of printers on commercial vehicles, J.B. Hunt and PeopleNet. considered a number of different products, including the HP Officejet 100 Mobile Printer, priced at $309, not ruggedized, which was the cheapest. Applying the cost for that printer to the 2,840,000 CMV drivers that FMCSA stated would be affected by the ELD requirements of this rulemaking, the initial purchase of printers would cost the industry $877,560,000. If each printer used one color cartridge and one black cartridge annually, the costs would be an additional $164,663,200 per year. If the printer has an expected life cycle of 5 years, the annualized replacement costs would be $175,512,000. The commenters wrote that the cost of equipping every weigh station and CMV enforcement cruiser in the country is minimal when compared to equipping CMVs with printers. While printers should be optional, these commenters maintained that the cost of requiring them on all CMVs is cost prohibitive. PeopleNet was also concerned with the security of printed log records, which could be lost, stolen, or damaged.

Continental believed it would have been appropriate to add external printer costs to ELDs prior to the mandate taking effect. However, Continental wrote that it is not appropriate to do so post-mandate, given that industry will

choose to use the much more cost-effective option of installing ELDs with an integrated thermal printer. Continental also stated that FMCSA's estimated cost of $500 for an external printer is on the order of five times more than current market costs; there are many portable thermal printers available for $100. As a reference point, Continental noted that taximeters with an integrated thermal printer cost between $150 and $350. The commenter wrote that FMCSA added the cost of an external printer to all ELDs when looking at the Options, which was fundamentally flawed because carriers would acquire more cost-effective solutions (*i.e.,* ELDs with an integrated printer). The cost of an integrated printer in an ELD is less than $10, considerably lower than the cost of an external printer. The VDO RoadLog ELD, currently available on the United States market, costs $500 and has an integrated printer.

A safety coalition stated that enumerating costs for a separate printer is unnecessary as ELDs with an integrated printer are available at less than FMCSA's estimated cost for an ELD lacking an integrated printer. While some carriers will choose options that best fit their operational needs regardless of cost, the commenter believed that the least expensive system that complies with ELD performance requirements for CMVs should be used for FMCSA's cost estimates. It commented that inflation of costs reduces net benefit calculations, and may be used by some to justify slowing or preventing an expedient ELD compliance process.

Knight stated that the most cost effective approach is not to require some kind of printout in the vehicle. The National Limousine Association opposed printers. Schneider opposed a requirement to supply printers in the vehicle because the cost will be prohibitive and far outweigh the benefits. Schneider wrote that the benefit of this rule is the paperwork reduction and requiring a printer would defeat that purpose. Another group stated that law enforcement officers could be equipped with a dedicated portable printing device that the officer could hold with a USB 2.0 plugged to the ELD and print the data, as almost all ELD manufacturers will accommodate a USB 2.0.

The Alliance for Driver Safety and Security believed that while carriers certainly have the option of using an ELD with a portable printer, they should not be required to do so. OTA stated that relying on the industry to provide a printed copy is not cost effective. Adding the cost of printers to each CMV would raise the cost of this rule to the point the benefits would not outweigh the costs.

3. FMCSA Response

In today's rule, FMCSA requires ELDs to have either the capability to transfer data to roadside inspectors telematically, via Web services and email, or the capability to transfer data locally, via Bluetooth and USB 2.0. The final rule also requires ELDs to have either a printer or display as a backup method for displaying data to law enforcement. FMCSA believes that leaving the decision to use a display or printout to the ELD providers and the motor carrier will allow individuals to make the most cost effective decision for their particular operations. By allowing alternative methods for electronic transfer of information, coupled with two backup mechanisms (display or printout), the Agency anticipates that ELD providers will offer alternative products, responsive to motor carrier needs.

G. Tax Credits and Relief To Off-Set Costs

1. Comments to the 2011 NPRM

The NPRM did not propose any tax credits because the Agency does not have the statutory authority to deal with such matters. However, several commenters, including FedEx and the Specialized Carriers and Rigging Association, suggested that FMCSA offer a tax credit for motor carriers using EOBRs, to offset carriers' costs. FedEx related this request to the use of EOBRs by Mexican motor carriers and drivers. The Truckload Carriers Association wanted direct financial relief from any EOBR mandate.

2. Comments to the SNPRM

The SNPRM did not propose any tax credits, nor were there comments.

3. FMCSA Response

FMCSA does not have the authority to offer any tax credits or direct financial relief. While FMCSA equipped each vehicle approved for use in the United States-Mexico Cross-Border Long-Haul Trucking Pilot Program with monitoring equipment, FMCSA owned the monitoring equipment and had access to and control of the data. The pilot program has ended, and FMCSA no longer funds the cost of those electronic monitoring devices.

H. Basis for Evaluating Safety Benefits

1. Comments to the 2011 NPRM

ATA believed that compliance with the HOS regulations will lead to better safety, stating that ''. . . data generated in the course of evaluating the agency's Compliance, Safety, Accountability program shows a strong correlation between hours of service compliance and favorable safety performance (*e.g.,* low crash rates).'' CVSA commented that the cost benefit analysis underestimated the number of lives saved and overestimated the cost of the EOBR by at least 50 percent based on information the organization has received from providers.

Some commenters criticized Agency studies or claimed that the Federal government had no evidence that EOBRs will help reduce fatigue. Commenters believed that more data or studies are needed, including studies to measure fatigue and issues related to the security of information. Some commenters said that there was no link between HOS compliance and safety. The National Limousine Association stated that the now-vacated 2010 final rule was based on insufficient data and that the information in the 2011 NPRM did not reflect enough research on the ''non-trucking'' part of the industry.

Commenters to the Regulation Room questioned the validity of existing methods for measuring fatigue. Some were concerned that fatigued driving is a political issue and the rule was not based on sound evidence. One of these commenters also requested that the cost of an upgrade for security reasons be included in the proposal cost.

OOIDA stated that no published data supported the rulemaking and believed that the degree of non-compliance was not known. OOIDA commented that the Cambridge Study, commissioned by FMCSA, showed ''no documented improvement in compliance or safety,'' and stated that non-driving time was being ignored. OOIDA also criticized FMCSA for relying on public comments when no data exist.

OOIDA said that the RIA was based on underlying flawed research, and that FMCSA lacked evidence to link benefits to this rule. It claimed that the RIA for the NPRM was inadequate due to the use of data from 2003, as well as ''false assumption[s]'' made about fatigue. It also wanted to know the credentials of the people making assumptions about the 2003 data and claimed that the National Highway Transportation Safety Administration's Fatality Analysis Reporting System (FARS) data contradicted the data used in the RIA. OOIDA stated that FMCSA failed to

show the connection between fatigue-related crashes and EOBRs.

OOIDA stated that the ''Agency has never attempted to demonstrate, through examples or detailed explanations, the benefits of EOBRs over paper logs during this rulemaking or EOBR 1.'' OOIDA also said that FMCSA ''use[d] assumptions/staff opinions rather than data or facts to try to measure safety benefits gained from EOBRs.'' OOIDA further stated that FMCSA had previously ignored analysis and data because they ''[did] not show improvements in safety.''

The Specialized Carriers and Rigging Association also believed that data failed to establish a link between crashes and EOBR use.

2. Comments to the SNPRM

Several commenters addressed the benefits of ELDs. The Alliance for Driver Safety & Security stated that the ELD mandate will improve compliance with Federal HOS rules and ultimately reduce driver fatigue and the number of highway crashes caused by driver fatigue. Alliance noted that the leading freight transportation companies have found that the ability to record accurate driving records decreases HOS compliance violations, reduces driver fatigue, improves inspection reports to the Compliance, Safety, and Accountability program, and improves Behavior Analysis and Safety Improvement Category scores.

AMSA stated that the proposed ELD requirements would significantly help to enhance HOS compliance, reduce paperwork for motor carriers and drivers, and increase CMV safety. NAFA Fleet Management stated that use of ELDs will improve compliance with HOS regulations, which is important because of the strong correlation between compliance with HOS regulations and safe operations. ELD provider BigRoad, Inc. stated that is has found that drivers and motor carriers who use electronic HOS solutions have increased awareness of, and compliance with, HOS requirements.

J.B. Hunt pointed out that many of the opponents of mandatory ELDs commented about the ''flexibility'' of paper logs and how they will not be able to run as many miles and earn as much money if they are held accountable for their driving time and breaks. J.B. Hunt stated that these opponents are acknowledging that they are not complying with the current regulation, which provides justification for mandating ELDs. Knight stated that electronic logs that record drive time and are tamper proof, to the degree proposed by the SNPRM, do not allow drivers to cheat on driving time. Knight pointed out that paper logs are often exploited and that the industry is in urgent need of a universal ELD mandate to ensure compliance with existing rules. Knight did acknowledge, however, that ELDs cannot prevent crashes or prevent drivers from violating HOS rules. The carrier noted that drivers must be individually accountable for following the rules and safe driving.

Several drivers spoke from personal experience about how the use of ELDs improves safety and compliance with HOS requirements. One driver stated that the system will remind him to take a break an hour in advance. The driver noted that this helps with safety by allowing him enough time to find a safe place to stop. The driver also pointed out that with electronic logs, his fleet manager can see the hours he has and better plan his loads. Another driver noted that his ELD keeps him from having log violations because it notifies him of his exact time status. The driver also stated that the ELD provides a definite benefit in trip planning and load booking, and enables him to determine if he has enough time to complete a load legally. The driver also stated that he is more productive. Another driver stated that the electronic log system forces drivers to be better trip planners, which makes them better drivers. The driver also pointed out that ELDs improve safety by giving drivers reminders of when they need to take a 30-minute break and when the end of their 14-hour tour-of-duty is approaching.

Numerous commenters stated that the use of ELDs will not improve safety or HOS compliance. OOIDA noted that the primary criticism of paper logbooks is the ease with which a driver can ''falsify'' time, which can lead to fatigue and unsafe driver. OOIDA believed an ELD is unable to provide any appreciable improvement to the accuracy of a driver's RODS and compliance with the HOS rules over paper logbooks, and submitted several hypothetical RODS constructed to demonstrate why, in its view, the use of ELDs does not result in improved HOS compliance because drivers would still be able to mask HOS violations by manually entering false duty status into the ELD. OOIDA stated that the ability of ELDs to automatically record the length of time a truck has been driven has no appreciable value over paper logbooks if drivers can continue to enter an incorrect duty status while they are not driving. OOIDA further stated that only an accurate record of both a driver's driving and non-driving activities will enable a determination of whether the driver is complying with HOS rules. OOIDA stated that ELDs will give inspectors and people concerned about highway safety a false sense of safety and driver compliance when, in fact, ELDs will permit up to 11 hours of unlawful driving a day without showing a violation. In addition, OOIDA argued that the safety analysis did not take into account that ELD use will increase pressure on drivers to violate speeding and other local ordinances and engage in other unsafe behavior. Advocates stated that a poorly crafted ELD regulation would provide drivers and carriers with the opportunity to continue to falsify logs electronically, thus enabling drivers to work, or to be forced to work, excessive hours resulting in fatigue and the associated increase in crashes, injuries and fatalities. Advocates expressed concern that the proposed rule does not ensure that drivers or carriers cannot manipulate the process of securing the data and transferring it from the ELD to roadside inspectors and enforcement officers, thus circumventing the purpose and intent of the regulation.

Quoting from FMCSA's April 2014 report on the safety benefits of ELDs,[28] the UMA noted the American Transportation Research Institute stated that the correlation between EOBRs and safety is weak. The UMA pointed out that the ELD mandate is a significant proposal for passenger carriers, and that a direct and measurable correlation between reducing crashes is a necessity that goes to the very core of the Agency's mission. Freightlines of America, Inc., stated that putting ELDs in CMVs will not get to the root of the problems in the industry, but instead make drivers and carriers more desperate to survive and endanger themselves, their businesses, and the public safety.

An individual commenter pointed out that FMCSA has yet to show any direct correlation between ELD use and reduced crashes, or any other kinds of safety benefit. The commenter also pointed to OOIDA's comments that the proposed rule as written will not improve highway safety, does not fully address the issue of driver harassment, and does not fulfill the requirements prescribed by Congress. Another individual pointed out that ELDs will not prevent drivers from lane deviation, following too closely, or any other poor driving habits. The commenter

[28] In the docket for this rulemaking, docket number FMCSA–2010–0167–0900. *http://www.regulations.gov/#!documentDetail;D=FMCSA-2010-0167-0900.*

recommended better driver training regulations, infrastructure maintenance, and improvements to the national highway system, ''share the road'' education for both commercial drivers and passenger vehicle drivers, and a greater focus on truck parking and increasing the number of rest stations. Implementing ELDs without addressing these issues would strain an industry that is already seeing a major shortage in drivers. The commenter pointed out that shippers and receivers detain trucks during loading and unloading without consideration for HOS requirements because they have no oversight over their actions.

Several commenters pointed to what they believe is the real reason for the ELD mandate—*i.e.,* big trucking companies trying to put smaller trucking companies out of business. The California Construction Trucking Association stated that mandating ELDs will not achieve the safety benefits calculated by the Agency, and that the only true beneficiaries of an ELD mandate would be those intent on chasing competitors from the market under the guise of safety. Herbi-Systems, a lawn care company, stated that there is no public demand for ELDs, and that some large trucking firms want to raise the cost of doing business for small trucking firms in order to minimize competition. An individual commenter stated that ELDs are not necessary for medium and small carriers because the drivers do not alter their paper RODS due to potential penalties. The commenter also stated that the big trucking companies who are pushing for the ELD mandate have sister companies with stock ownership in companies that produce ELDs.

Klapec commented that ELDs are no more reliable than paper logbooks, and the ''safest thing to put into a truck is a well-trained, experienced driver.'' Klapec noted that experienced drivers will leave the industry, causing an increase in crash and fatality rates. It believed the Agency is discriminating against small carriers, and stated that large carriers know that the ELD mandate will cause an exit of many small carriers from the marketplace because they will be unable to sustain the high costs of doing business. Klapec said that the Vice President of ELD provider XATA Corporation sits on two of the three boards for FMCSA and that XATA Corporation stands to gain a potential windfall of business if the ELD mandate goes through. Klapec also pointed out that ATA's members include big, national carriers that are eager to see small carriers, like Klapec, become extinct. Klapec urged the Agency to be careful about who is on its advisory boards, who is giving advice on the potential benefits of ELDs, and who stands to benefit from the passage the proposed ELD mandate.

3. FMCSA Response

In the SNPRM, FMCSA used a different approach from that in the 2011 NPRM to estimate the number of crashes mandatory ELD use will prevent. Based on an analysis of carriers using ELDs, and using the peer-reviewed Roadside Intervention Model,[29] FMCSA was able to estimate the reduction in crashes from mandatory ELD use. This estimate used a sample period from January 2005 through September 2007, which contained 9.7 million interventions.

Generally, ELDs bring about improvements in safety by making it difficult for drivers and carriers to falsify drivers' duty status which in turn deters violations of the HOS rules. And increased compliance with the HOS rules will reduce the risks of fatigue-related crashes attributable, in whole or in part, to patterns of violations of the HOS rules. Part of the improvement in safety also involves motor carriers accepting the responsibility of reviewing the electronic records and supporting documents. Motor carriers are required to ensure their drivers comply with applicable safety regulations and motor carriers that strive to do so will now have a more effective tool for reviewing drivers' RODS.

A more detailed explanation of the process FMCSA employed to determine crash reduction benefits, with a clear, full accounting of assumptions and procedures, is in the RIA for this rulemaking. In response to these comments, FMCSA also undertook a study about the potential safety benefits of the ELD, and discusses that study and comments received about it in today's rule, in Section XII, K, of this preamble.

OOIDA submitted several hypothetical RODS constructed to demonstrate why, in its view, the use of ELDs does not result in improved HOS compliance because drivers would still be able to mask HOS violations by manually entering false duty status into the ELD. We note that the examples OOIDA provides rely on the premise that drivers using paper RODS accurately record their driving time and location. FMCSA's enforcement experience demonstrates that is not always the case. Contrary to OOIDA's assertion that ''knowing how long a driver has operated a truck rarely helps identify whether the driver is in compliance with the HOS rules'', the Agency's field inspection personnel report that the bulk of their time spent on enforcement is in determining whether or not the driver has accurately entered driving time on the paper log. The use of ELDs would minimize this concern.

Rather than respond directly to OOIDA's hypothetical scenarios, we think it is more useful to illustrate how ELD use could have easily detected actual HOS violations recently documented in FMCSA's field reports. For example, an FMCSA inspector reviewed a driver's paper log, which showed that he was within the permitted HOS and that he had taken the required breaks. However, when the inspector compared the paper log to the driver's time/date stamped toll receipts, it was apparent that the driver was at least 500 miles from the location shown on his log for a particular day. The inspector concluded that the driver simply could not have reached that location by taking the required 10-hours of off-duty driving time and by travelling at a speed of 60 miles per hours as ''documented'' on the log. Had an ELD been installed in this driver's truck, the device, by automatically capturing driving time, mileage and location, would have made this HOS violation readily apparent to the FMCSA inspector.

Another recent example of an actual HOS violation involved a driver leaving Arkansas just before noon on a Saturday to reach the first of several retail delivery locations in California the following Monday morning. The driver's paper RODS showed 30 hours of driving time, arranged to accommodate the required 10-hour breaks. The log also showed that the driver spent about an hour unloading at each of the retail locations in California. However, when the FMCSA inspector compared the GPS-based asset tracking record with the driver's log, it was apparent that, between Arkansas and California, the driver stopped for only brief periods, most of which ranged from 15 minutes to 75 minutes. The longest period the driver stopped driving did not exceed 3 hours during a total of 34 hours of actual driving time. Asset tracking also showed that the periods of unloading took longer than the hour that the driver logged.

As with the previous example, an ELD would have immediately revealed the falsification of the driver's RODS. The Agency thus believes it is reasonable to conclude that drivers would be less likely to engage in, and carriers would be less likely to encourage, the types of

[29] See Appendix E of the RIA to today's rule, available in the docket.

HOS subterfuge that ELDs would readily detect. We also believe that ELDS will facilitate better trip planning by drivers and carriers, resulting in fewer unintentional HOS violations. While FMCSA acknowledges that ELDs will not prevent every crash or ensure that every driver will follow the HOS rules to the letter, we do believe that by reducing HOS violations, ELDs will result in less fatigued and less dangerous drivers, thereby achieving the statutory mandate of MAP–21.

In addition, to the extent that OOIDA focuses on ELDs as the sole means of monitoring HOS compliance, that focus is misguided. In addition to retaining RODS, motor carriers have long been required to retain supporting documents. Today's rule continues that requirement while also providing specific guidance as to the type of documentation that must be retained. In addition, today's rule requires drivers to make available supporting documents in their possession upon request during a roadside inspection. Enforcement personnel as well as carriers rely on these documents along with driver's RODS, to provide a more comprehensive view of a driver's workday.

Finally, we also note that, in addition to HOS violations, certain aspects of the behavior OOIDA describes in its hypothetical RODS are currently prohibited under the FMCSRs. For example, FMCSA could cite a motor carrier under 49 CFR 392.6 for scheduling a run between points in a way that would necessitate speeding. Similarly, § 392.2 requires that CMVs be operated in accordance with local laws; § 392.3 prohibits driving, and prohibits the carrier from requiring driving, while the driver is fatigued, ill or the driver's ability to remain alert is otherwise impaired.

XII. Discussion of Comments Related to Procedures, Studies, Etc.

A. Registration and Certification

1. Comments to the SNPRM

FMCSA proposed that ELD providers would have to register with FMCSA, certifying that their devices meet the requirements and providing information on how the ELD works and how it was tested. FMCSA would make much of that information available on an FMCSA Web site that would list the registered providers. FMCSA would develop optional test procedures, which providers could use to ensure their ELDs meet the requirements. In the SNPRM, FMCSA sought comments on the certification issue and the ability of carriers and providers to meet the requirements in the time provided.

Although ATA, UMA, and CVSA supported the certification process, OTA opposed it, arguing that it would expose carriers to considerable risk. If a device is later held to be non-compliant, the carrier would have a fleet of vehicles that might need to be taken off the road. OTA stated that FMCSA should provide assurance that a carrier is not at risk of having to replace a registered product or have its logs declared invalid. OTA was concerned that FMCSA might refine the regulations, which could require expensive modifications, reprogramming, or replacement of the first equipment purchased.

Drivewyze noted that FMCSA has not anticipated the use of intermediaries to support ELD providers' internet-connected data transfer needs; the intermediaries may also need to register and conform to FMCSA standards. ATA stated that providers contend that the cost of the upgrades will be high and that the existing hardware will need to be tested.

FedEx, UMA, CVSA, and an ELD provider stated that FMCSA should require each registering providers to use FMCSA-prescribed test procedures to provide carriers with some assurance that the devices meet the specific requirements. CVSA stated that the certification process must include resistance against tampering with the device/system.

Several providers raised concerns about the information that has to be submitted. Some stated that only major releases should be reported to FMCSA—not every update. Zonar asked if ''version'' refers to hardware or includes software, and whether providers will be able to update information posted on the FMCSA Web page, and stated that providers should be listed in random order.

Some providers questioned the requirement to provide the user manual. XRS stated that the Enforcement Instruction Card should be sufficient; the user manual may contain proprietary information that should not be publicly available. Omnitracs recommended providing a link to the provider's Web site rather than the manual; this would make it easier to ensure that carriers had access to the most recent version.

2. FMCSA Response

In today's rule, FMCSA includes procedures for provider registration of an ELD as they were proposed in the SNPRM. However, in response to comments, FMCSA is adding section 5.4 to the technical specifications—a procedure to remove a listed certification from the Web site—in order to provide additional assurance to motor carriers that that the ELDs listed on the provider registration Web site are compliant. The procedure includes as a preliminary step an opportunity for the ELD provider to cure any deficiency. It also protects an ELD provider's interest in its product.

Today's rule provides the specifications for the data elements and related HOS data transfers that are mandatory to develop a compliant ELD in the appendix to subpart B of part 395. This includes all aspects of the file structure, formatting, and naming conventions. However, FMCSA understands that providers and motor carriers need assurance that an ELD meets FMCSA's requirements. FMCSA will provide guidance to providers that will contain the tools providers will need to ensure that their ELD meets the technical specifications. However, it will be the responsibility of each provider to ensure that its product complies with the RODS file data definitions FMCSA provides.

While FMCSA does not mandate third party software requirements, it allows for them, and will provide guidance so that providers can evaluate whether they are in compliance with part 395. Any agents acting on behalf of a motor carrier must comply with FMCSA's regulations as well.

FMCSA provides more information about this process, and the mandatory elements that providers will have to submit to FMCSA in order to be listed on the public Web site, in the ICR notices related to ELD provider registration. FMCSA released the related Paperwork Reduction Act ICR notice for public comment on October 28, 2014 (79 FR 64248).

The elements that providers have to submit are adopted as proposed in section 5.2.1, Online Certification. User manuals are generally available to the public. Given required submission, FMCSA does not believe that providers would include proprietary information that the manufacturer does not want to make available to the public.

The elements that providers may have to submit are limited to those included in the ICR for ELD certification. The ICR process is separate from the rulemaking process, and FMCSA responds to comments on the ELD certification ICR in the notice issued in accordance with the Paperwork Reduction Act on April 3, 2015 (80 FR 18295).

B. Compliance Date and Grandfather Period

1. Comments to the 2011 NPRM

The NPRM proposed a compliance date 3 years after the effective date of the anticipated final rule. Motor carriers would have been required to install EOBRs in CMVs manufactured on or after June 4, 2012. Motor carriers that installed AOBRDs before the compliance date of the final rule would have been allowed to continue to use those devices for 3 years beyond the compliance date, for a total of 6 years after the publication of a final rule.

The Agency asked for comments on factors it should consider to determine if the compliance date should be adjusted (76 FR 5544, February 1, 2011). It asked if EOBRs should be phased-in, based on the number of power units in a motor carrier's fleet.

Several commenters, including CVSA, supported a 3-year implementation period with a single effective date for EOBR use. The Insurance Institute for Highway Safety believed that the compliance date should not be later than 3 years. Several commenters contended that the 3-year period is too long; others believed that the proposed 3-year compliance period was too short.

Some commenters, including AMSA, NSTA, and NPGA, asked for a 5-year compliance period. While a large motor carrier recommended that large motor carriers have additional time, several large carriers, as well as TCA and ATA, opposed different compliance dates. AMSA recommended that FMCSA conduct a 2–3 year operational test of EOBRs, providing EOBRs to United States-based motor carriers under a program similar to the Agency's North American Free Trade Agreement pilot program.

2. Comments to the 2014 SNPRM

Subsequent to the NPRM, Congress enacted MAP–21, which required that the ELD regulations apply to a CMV beginning 2 years following publication of the rule (49 U.S.C. 31137(b)(1)(C)). In the SNPRM, FMCSA proposed an effective date of 30 days after publication of a rule in the **Federal Register** and a compliance date of 2 years thereafter. FMCSA proposed that motor carriers that installed AOBRDs, as described in current § 395.15, before the compliance date of the ELD rule be allowed to continue to use those devices for 2 years beyond the compliance date.

Two-Year Compliance Date

Four commenters, including the NTSB, expressed support for the proposed effective and compliance dates. Knight the Alliance for Driver Safety & Security, and the NTSB urged FMCSA to implement the rule quickly. The American Moving & Storage Association stated that the compliance schedule for mandated ELDs and related requirements are appropriate.

The majority of commenters on this issue, however, stated that the proposed 2-year compliance date should be extended. CHP recommended collaboration with private and public stakeholders to ensure compliance dates are realistic. The UMA stated that FMCSA should consider an incremental approach.

The ABA stated that 3 years is the absolute minimum needed for ELD implementation in the motorcoach industry. YRC estimated that under a 2-year implementation schedule, it would have to take approximately 500 trucks a month out of service for installation and train 700 to 1,000 drivers a month on the new devices. The National Propane Gas Association stated that a 3- to 5-year compliance deadline is necessary to ensure sufficient availability of devices and that there is enough time to install them.

CVSA and an ELD provider stated that the grandfather clause should be eliminated, and that a 3-year compliance deadline should be applied to all CMVs. CVSA stated that having multiple compliance deadlines would complicate roadside enforcement and undermine uniformity. Omnitracs was concerned that there could be confusion with enforcing the grandfather period and, therefore recommended a 3-year compliance deadline for ELD use.

Four commenters stated that the compliance deadline should be extended to 4 years from the effective date. MPAA suggested that FMCSA delay initial enforcement of its all-electronic roadside inspection requirement or apply the ELD mandate to production drivers either 1 year after FMCSA confirms that sufficient RODS transfer functionality is available in the market, or 2 years after the initial implementation of the rule (*i.e.,* 4 years after publication).

Two-Year Grandfather Period

Most of the commenters on this issue, including Roehl Transport, the International Foodservice Distributors Association, the Snack Food Association, UMA, TCA, ATA, and OTA, stated that the proposed 2-year grandfather period for AOBRDs installed prior to the compliance date is too short. Many recommended that carriers be permitted to use installed AOBRDs for the remainder of the service life of the vehicle in which they are installed. ATA and TCA both stated that failure to extend the grandfather period for the life of the vehicle would discourage fleets from making an early investment in ELDs. A non-profit transit provider noted that it has already invested in Mobile Data Terminals and tablets for some of its vehicles, and asked that FMCSA allow flexibility to upgrade current devices to meet the proposed requirements.

The NAFA Fleet Management Association agreed with FMCSA's proposed 2-year grandfather period. However, an ELD provider and the Alliance for Driver Safety & Security recommended eliminating the 2-year grandfather provision. The ELD provider stated that it would unnecessarily extend the use of noncompliant systems, incentivize some carriers to circumvent HOS enforcement, and undermine the ability of law enforcement to enforce the ELD mandate and the HOS rules. The provider believed it would be difficult to determine if an AOBRD was installed before or after the compliance date. Law enforcement will need to be trained to use both AOBRDs and ELDs, which will also increase the cost of enforcement.

Knight recommended that FMCSA be more specific in identifying the conditions for eligibility for the 2-year grandfather provision. It believed that a ''high percentage'' of the fleet should be so equipped to be eligible.

3. FMCSA Response

In enacting MAP–21, Congress required the Agency to use a compliance date 2 years after publication of the rule. This means that a CMV driver required to use an ELD will be required to use a certified ELD 2 years after this rule is published unless the grandfathering provision is met. Until this date, existing AOBRD devices or paper logs will be acceptable. In today's rule, FMCSA clarifies that the compliance date, as well as the grandfather period, is calculated to run from today's publication rather than from the effective date of the rule, consistent with the requirement of MAP–21.

For 2 years after the compliance date, today's rule requires a driver subject to this regulation to use either an ELD or an AOBRD, *i.e.,* a device that meets the requirements of § 395.15, which was installed and that a motor carrier required its drivers to use before the rule compliance date. FMCSA clarifies that the grandfather provision is vehicle-based, not fleet-based.

While FMCSA proposed a 3-year grandfathering date in the NPRM, mirroring the 3-year compliance date in

that proposal, FMCSA does not believe the intent of the statute would allow for a grandfathering date longer than the compliance date. Therefore, the rule allows drivers to continue to use grandfathered AOBRDs for 2 years after the rule's compliance date. FMCSA declines to remove or shorten the grandfathering period beyond what was proposed in the SNPRM. The Agency believes that some transitional time is necessary for ELD providers to produce a sufficient quantity of ELDs to meet the needs of the motor carrier industry.

FMCSA does not think that the 2-year grandfather period will penalize early adopters of logging technology. Motor carriers currently using AOBRDs will have 4 years of use of the devices, starting from the publication date of this rule; these devices have an estimated useful service life of 5 years. FMCSA notes that it has heard from ELD providers during the rulemaking process, as well as through the MCSAC subcommittee on ELD technology, about their current technologies. The Agency kept current systems in mind while developing the technical specifications, and believes that many existing AOBRDs can become ELDs.

Given the obstacles and cost of converting AOBRDs operated under 49 CFR 395.15, FMCSA believes that it will be necessary to have some overlap in time where both AOBRD and ELD devices are acceptable. The Agency does not think that this will lead to a delayed enforcement program or inconsistency. Other than grandfathering current AOBRDs, the Agency does not provide a phased or incremental compliance period.

The Agency notes that, in today's rule, it corrects references to the compliance and grandfather date. The clock starts at the rule publication date, rather than the effective date, consistent with MAP–21.

C. Penalties and Enforcement

1. Comments to the 2011 NPRM

An individual commenter asked who would be responsible for paying the penalty for disconnecting an EOBR device. Another commenter said that EOBR records should provide drivers the same authorities as a ship's logs and have the same rules against fraudulent entries. A commenter stated that the EOBR will now make it ''institutionalized'' that driving during a break period is a violation of the HOS, no matter the circumstances. The commenter stated that this would lead to drivers getting HOS violations and losing their livelihoods.

2. Comments to the 2014 SNPRM

FMCSA proposed a new prohibition against harassment, subject to a civil penalty, for a motor carrier that engages in harassment. Harassment would be considered in cases where a motor carrier is alleged to have required a driver to violate the HOS rules involving the use of the ELD.

Some commenters recommended enhanced penalties for repeated violations of the ELD requirements. Advocates stated that there is no provision for specific or enhanced penalties to be imposed for violations of the requirement to use ELDs. Advocates believed the Agency must specify strong penalties for intentional and unintentional violations that progressively increase with a subsequent violation and permit an out of service order for a carrier, and provide for disqualification of a driver found to have committed a third violation of the ELD requirements.

A coalition of safety groups (Truck Safety Coalition, Parents Against Tired Truckers and Citizens for Reliable and Safe Highways) stated that carriers and drivers must have a strong motivation to comply with the new ELD regulation, and serious and meaningful penalties should be identified as part of the rulemaking to ensure that the cost of a violation is not merely part of doing business. These commenters wrote that, unfortunately, there is no provision for penalties in the ELD regulation. They believed that FMCSA must remedy this oversight and include strong penalties for offenders, with an escalation for repeat offenders such that, by the third violation, an order to cease operation is issued.

EROAD supported FMCSA's approach. It commented that the proposed regulation leaves States with the flexibility to continue their own commercial vehicle policies and enforcement approaches while allowing private companies to support the requirements in an open market environment.

FedEx commented that it is possible that law enforcement will be inclined to write violations for failing to use an ELD if the driver cannot prove at roadside that he or she did not complete a log more than 8 times in the last 30 days. In effect, this rule would require these occasional drivers to carry their HOS records for the previous 30 days in their vehicles, directly conflicting with the requirement that drivers retain logs only for the previous 7 days.

IBT supported heavy penalties for carriers who harass and coerce drivers to violate HOS regulations. IBT would also like FMCSA to include language in the rule that defines penalties for carriers and drivers when evidence of tampering is detected. It supported heavy penalties issued to carriers who tamper with or otherwise alter a ELDs ability to operate per FMCSA specifications.

IBT commented that the SNPRM provides that a motor carrier may request an extension of time from FMCSA to repair, replace, or service an ELD. Unless an extension is granted, a driver could receive a citation for the malfunctioning ELD. The IBT does not support this language, as it would unjustly penalize the driver for the motor carrier's failure to apply for a service extension correctly. IBT believed that the driver should only be responsible for having manually prepared RODS for the current 24-hour period and the previous 7 days. Any citation issued by law enforcement should be directed to the carrier, not the driver where the driver can produce evidence, via the driver vehicle inspection report (DVIR) or other acceptable means, that he/she notified the motor carrier of the malfunction within the specified 24-hour period.

Inthinc recommended that the regulations state that law enforcement officers must ask carriers, not drivers, for non-authenticated driver logs.

3. FMCSA Response

FMCSA adopts an approach that increases drivers' control over their own HOS records in order to maximize transparency and ownership of edits being made. All edits to ELD records will appear with clear authorship. FMCSA clearly prohibits any kind of ELD tampering or altering.

The Agency prescribes penalties for non-compliance with the requirements in today's rule. Civil penalties for violations of regulations addressing ELDs will be assessed under Appendix B to 49 CFR part 386, and numerous factors, including culpability and history of prior offenses, are taken into account. 49 CFR 386.81. Tampering with an ELD is also an acute violation under FMCSA's safety rating process under today's rule. Section VII of Appendix B to 49 CFR part 385. FMCSA includes a provision that allows penalties for harassment to be enforced at the maximum levels in order to discourage motor carriers and drivers from committing violations. In assessing the amount of a civil penalty, however, the Agency is required by statute to take certain factors into account. See 5 U.S.C. 521(b)(2)(D). Thus, the Agency intends to apply this provision through its Uniform Fine Assessment software to

assure civil penalties are assessed in individual cases in a fair manner while addressing the gravity of harassment violations at an appropriate level.

Both motor carriers and drivers are prohibited from committing violations of the FMCSRs. FMCSA acknowledges, through today's rule, concerns of harassment of drivers by motor carriers through the use of ELDs and related technologies, and believes provisions addressing harassment appropriately target motor carriers for actions affecting drivers they control. The use of an ELD makes a driver's HOS records more transparent. Furthermore, carriers using ELDs with related communication components generate records documenting carrier/driver interactions. These electronic records generated in the ordinary course of business are covered by the supporting documents provisions in today's rule.

During investigations, inspections, and safety audits, FMCSA and its State partners will evaluate the 8 out of 30 day threshold for ELD use under today's rule. Drivers currently allowed to use timecards may continue to do so under the provisions of 49 CFR 395.1(e). Authorized safety officials may request the time cards from the motor carrier supporting the exception. Section 395.1(e)(2)(v) requires a motor carrier to maintain ''accurate and true time records'' for each driver. These records must show the time the driver goes on and off duty, as well as the total number of hours on duty, each day. The lack of a time record for a driver under this exception on any given day would ordinarily suggest that the driver was not on duty that day. If an authorized safety official discovers that the driver was in fact on duty, despite the absence of a time record, the motor carrier has violated § 395.1(e), because it has not retained ''true and accurate time records.'' Appropriate enforcement action may then be taken. FMCSA recognizes that records relevant to the evaluation of the 8 out of 30-day exception will not ordinarily be available during roadside inspections. However, this factor does not differ from enforcement of the short-haul exception at roadside, where similarly, on-site confirmation generally is not available from records inspection or otherwise.

D. Enforcement Proceedings

1. Comments to the 2014 SNPRM

The SNPRM included a new procedural provision, § 395.7, Enforcement proceedings. The proposed provision encompassed three concepts, providing that: (1) A motor carrier is liable for an employee's acting or failing to act in a manner that violates the HOS rules if the action is within the course of the motor carrier's operation; (2) the burden of proof in demonstrating that an employee's action was outside the course of the motor carrier's operation is on the carrier; and (3) knowledge of a document in a motor carrier's possession, or available to the motor carrier, that could be used to enforce the HOS rules is imputed to the motor carrier.

Given drivers' autonomy, ATA stated that a carrier ought to be held liable only in cases where the carrier encouraged a violation or, for undetected violations by an employee, where the government can show that the carrier failed to perform due diligence in providing instruction and training to the driver on HOS compliance. ATA indicated that the burden of proof ought to be on the government for proving HOS violations.

With respect to the proposed provision imputing knowledge of a document to the carrier, OTA asked what ''available to the motor carrier'' means, and to what extent the motor carrier is required to pursue such documents. OTA suggested that the carrier should only be charged with knowledge of a document if the carrier receives that document in the regular course of business. J.B. Hunt stated that the Agency must define the term ''available'' and present a cost benefit analysis addressing the paperwork burden the new standards place on carriers. J.B. Hunt also recommended that certain statements in the SNPRM be modified to make it clear that carriers are responsible only for documents generated and maintained during the normal course of business.

2. FMCSA Response

The provisions originally proposed as § 395.7 in the SNPRM, addressing part 395 enforcement proceedings, are included as § 386.30 in today's rule. The provisions are moved to codify the enforcement provisions with other rules of practice.

Motor carriers and drivers share the responsibility for complying with HOS requirements under part 395. A motor carrier's responsibility for an employee's violation of the HOS rules is not a new concept; it dates back to the Interstate Commerce Commission. Under 49 CFR 390.11, a motor carrier is required to have its drivers observe any duty or prohibition on drivers under the FMCSRs. Section 386.30(a) reiterates a carrier's liability with respect to the HOS rules. The FMCSA and its predecessor agencies have consistently held carriers liable for their drivers' actions that violate the HOS regulations. This addition, however, does not in any way modify a carrier's liability under 49 CFR 390.11.

Carriers are deemed to have knowledge of regulatory violations if the means were present to detect the violation. (See *In the Matter of Goya Foods, Inc.,* Final Order (July 7, 2014).[30] Section 386.30(a) codifies administrative case law addressing a motor carrier's responsibility for an employee acting within the course of the motor carrier's operations. For example, in the case of a driver providing false logs, a carrier is responsible for the driver's violation regardless of the systems it has established to prevent violations or whether it actually detected the violation. (In the Matter of Holland Enterprises, Inc., Order Appointing Administrative Law Judge p. 4 (February 13, 2013)).[31] This is consistent with the principle of *respondent superior. Id.* However, this concept does not result in strict liability in that a carrier could argue the driver was acting outside the scope of employment. (*See* In the Matter of Stricklin *Trucking Co., Inc.,* Docket No. *FMCSA–2011–0127* (*Order on Reconsideration* Mar. 20, 2012)).[32]

In terms of the applicable burden of proof under § 386.30(b), a motor carrier claiming that a driver was acting outside the carrier's operations is in the best position to establish this fact and will need to raise the issue as an affirmative defense under the rule.

Section 386.30(c), providing that a motor carrier is deemed to have knowledge of any document in its possession or available to the motor carrier for purposes of enforcement proceedings, is written to preclude a motor carrier from ignoring documents that would assist in monitoring its drivers. Questions of imputed knowledge are more likely to arise in enforcement of false log violations than violations of provisions governing supporting documents. The concept of imputed knowledge is material in determining the effectiveness of a motor carrier's efforts in monitoring its drivers. Generally, a carrier has imputed knowledge if it could have discovered violations had it reviewed its internal records. (See *In the Matter of Transland,*

[30] Available in Docket FMCSA–2011–0156, *http://www.regulations.gov* (Document No. FMCSA–2011–0156–0004).

[31] Available in Docket FMCSA–2008–0233, *http://www.regulations.gov* (Document No. FMCSA–2008–0233–0006).

[32] Available in Docket FMCSA–2011–0127, *http://www.regulations.gov* (Document No. FMCSA–2011–0127–0013).

Inc., Decision of Chief Administrative Law Judge (February 16, 2010)).[33]

Nevertheless, available documents are not necessarily limited to documents a carrier actually uses in its normal course of business in ensuring compliance with the HOS rules. Rather, the standard is whether the documents could be used to determine compliance. (See *In the Matter of Roadco Transportation Services, Inc.,* Decision on Petition for Review of Safety Rating (December 4, 2003);[34] see also *In the Matter of Stricklin Trucking Co., Inc.,* Order on Reconsideration (March 20, 2012)).[35] Section 386.30(c), prescribing the imputed knowledge concept applicable to enforcement proceedings, is not intended to modify a motor carrier's current obligations under the Agency's administrative case law. Thus, in response to J.B. Hunt's comment, no new paperwork burden results. In terms of the impact on motor carriers, today's rule neither increases nor decreases the burden associated with supporting documents.

E. FMCSA Should Not Provide Mexican Motor Carriers With ELDs

1. Comments to the 2011 NPRM

Between October 14, 2011, and October 10, 2014, FMCSA conducted the United States-Mexico Cross-Border Long-Haul Trucking Pilot Program (Pilot Program). The Pilot Program evaluated the ability of Mexico-domiciled motor carriers to operate safely in the United States beyond the municipalities and commercial zones along the United States-Mexico border. The Pilot Program was part of FMCSA's implementation of the North American Free Trade Agreement cross-border long-haul trucking provisions. As part of FMCSA's information gathering process, FMCSA equipped each vehicle approved for use by a Mexico-domiciled motor carrier in the Pilot Program with an electronic monitoring device.

Numerous commenters strongly objected to FMCSA's funding of electronic monitoring devices for CMVs in the Cross-Border Pilot Program. Klapec, AMSA, and FedEx believed that the United States government was providing Mexican-based carriers with an advantage not available to domestic carriers. AMSA suggested FMCSA institute a 2 to 3-year long pilot program, for which FMCSA would fund the EOBRs, to test the integration of EOBRs into the CMV fleet nationwide. FedEx felt that FMCSA's agreement to pay for EOBRs in Mexican trucks bolstered its suggestion that the United States government provide tax credits to purchasers of EOBRs to offset their costs.

2. Comments to the 2014 SNPRM

A number of commenters objected to FMCSA paying for electronic monitoring devices for foreign carriers. Some suggested that FMCSA fund ELDs for domestic carriers.

3. FMCSA Response

FMCSA acknowledges commenters' concerns about the Agency purchase of ELDs for foreign motor carriers. The Agency emphasizes that the purchase was an essential step to ensuring appropriate levels of oversight during a pilot program. FMCSA used electronic monitoring devices with GPS capabilities to monitor the operation of vehicles used in the Pilot Program and used the data to identify potential violations. This approach addressed concerns expressed by members of Congress and others.

FMCSA owned the monitoring equipment and had near real-time access to and control of the data provided by the electronic monitoring devices and GPS units, 24 hours per day, every day of the week. This will not be the case with the ELDs required through this rulemaking.

The Pilot Program ended in October 2014 and FMCSA discontinued the subscription service used in connection with the devices. FMCSA no longer funds the cost of electronic monitoring devices for Mexico-domiciled carriers authorized to operate in the United States.

The suggestion that ELD's acquired during the Pilot Program provide foreign carriers with a competitive advantage is without merit. The number of vehicles equipped with ELDs was limited, with approximately 55 vehicles operating at the conclusion of the pilot program. Also, foreign carriers are prohibited from making domestic point-to-point deliveries within the U.S. FMCSA is not in a position to fund ELDs for domestic carriers and implementing a domestic pilot program is inconsistent with the Congressional mandate that the Agency require certain drivers to use ELDs.

F. International Issues

1. Comments to the 2011 NPRM

Under existing regulations, drivers from Canada and Mexico who drive in the United States need to be in full compliance with our HOS rules once they cross the border—just like any domestic driver. Under this rulemaking, Canadian and Mexican drivers would keep their RODS using an ELD in the same way that United States drivers would, unless they qualified for one of the exceptions.

The Regulation Room received a remark suggesting that an EOBR helped ''keep a driver straight'' in the face of complex rules, and allowed the driver to change from Canadian to United States rules with the flip of a switch. However, Verigo, a Canadian wireless logbook provider, recommended that FMCSA allow companies in the oil and gas sector, which operate under an equivalent level of safety required by a Canadian Oil Well Service Vehicle Permit, be exempt from mandatory use of EOBRs. CVSA commented that Canada is pursuing the development of an EOBR standard. It recommended that FMCSA make every effort to work with Canada to develop a harmonized standard across North America.

OOIDA believed that there might be a need for a dual mandate for both paper RODS and EOBRs, absent a Canadian mandate. This would add to the costs of the United States mandate for those drivers. The Air and Expedited Motor Carriers Association, the National Association of Small Trucking Companies, and The Expedite Association of North America (TEANA), responding together, were concerned about the compatibility of United States and Canadian requirements for EOBRs because Canada required EOBRs to print and present a paper log.

2. Comments to the 2014 SNPRM

Klapec stated that Mexican and Canadian trucking companies are already taking a share of the trucking business from small United States carriers, and believed that the ELD mandate would make competition between small carriers and foreign carriers impossible. An individual commenter stated that FMCSA wants American truckers to operate like truckers in Europe, despite the different economic situation between Europe and the United States. A number of commenters questioned how the rule will apply to Mexican or Canadian drivers.

Several commenters emphasized the importance of harmonizing the proposed regulation with Canadian and Mexican standards. Greyhound pointed out that the SNPRM does not address the compatibility of the proposed ELD standards with Canada and Mexico, and noted that compatibility among the

[33] Available in Docket FMCSA–2006–25348, *http://regulations.gov* (Document No. FMCSA–2006–25348–0133).

[34] Available in Docket FMCSA–2002–13667, *http://regulations.gov* (Document No. FMCSA–2002–13667–0005).

[35] Available in Docket FMCSA–2011–0127, *http://regulations.gov* (Document No. FMCSA–2011–0127–0013).

three countries is critically important for carriers like Greyhound who operate a large number of daily trips between the United States and Canada or Mexico. UMA pointed out that there is significant international traffic (between the United States and Mexico and Canada) involving passenger carriers and recommended FMCSA complete regulatory harmonization prior to full implementation of the proposed rule. ABA noted that Canadian motor carrier authorities have not instituted a change in their regulations in line with the United States ELD proposed rule. ABA further noted its understanding that Canadian authorities will wait for FMCSA to issue its rule before considering any changes to Canadian laws and regulations. It stated that the 2-year compliance period may be an insufficient period of time for Canadian-domiciled carriers to obtain ELDs.

A Canadian owner-operator stated that FMCSA should exempt Canadian owned and operated CMVs from ELD regulations because FMCSA is not adopting Canada's HOS regulations. The commenter asserted that the imposition of ELD regulations forces the Canadian Federal Transportation Ministry to enforce United States law on Canadians operating in the United States.

ELD provider PeopleNet requested further clarification as to how to manage harmonization of data for those drivers who transition between United States Federal regulations and Canadian or intrastate regulations. XRS pointed out that there are additional data elements for each duty status change, as well as several additional events, such as ignition on, which will need to be captured in the harmonization required for drivers who travel between Canada and the United States.

Two individual commenters addressed the issue of drivers traveling between Alaska and the lower 48 states through British Columbia and the Yukon Territory. One commenter noted that there are different HOS requirements for each jurisdiction through which he travels. The commenter stated that it would be impossible for an ELD to function properly under these circumstances. The other commenter pointed out that there are many areas between Alaska and the lower 48 states in which GPS devices do not show accurate locations. That commenter noted that he has researched several ELDs and found that none would work for his situation.

A recruiter who hires owner-operators for a small carrier in Canada was concerned about the impact the ELD mandate will have on the expedite business from Canada to the United States. The recruiter pointed out that Canadian owner-operators who agree to install ELDs in their trucks to do this expedite work to the United States will also be required to use the ELDs for local work to be compliant with the United States regulations. The recruiter noted that most of the owner-operators he spoke to in Canada stated that if the ELD mandate goes into effect they will stop doing expedite work and either do local work only or retire from trucking entirely.

3. FMCSA Response

The Agency emphasizes that this rule does not alter the underlying HOS regulations or the obligation of drivers to comply with the applicable rules of the jurisdiction in which they are operating. Though FMCSA agrees that complying with several sets of regulations can be complex and challenging, the applicable requirements have not been altered. FMCSA requires that Canada- and Mexico-domiciled drivers comply with the Federal HOS rules while operating in the United States.

While FMCSA agrees with the commenter that regulatory harmonization would be ideal, North American HOS harmonization is not an option at this time. However, the Agency understands that there are electronic monitoring devices currently on the market that have been programmed to accommodate the HOS rules of multiple jurisdictions. Further, under today's rule, a driver operating in multiple jurisdictions would be able to annotate the driver's record of duty status on the ELD to reflect information about periods outside the United States. Regarding the concern raised by several entities that Canada requires a printout of an electronic log, today's rule includes a printer option. FMCSA declines to exempt through this rulemaking specialized equipment or vehicles tied to specific industrial sector, including CMVs subject to safety regulation under a Canadian Oil Well Service Vehicle Permit.

G. Effects of ELDs on Current Business Practices

1. Comments to the 2011 NPRM

Several commenters stated that the impact of ELDs would unevenly fall on smaller carriers. OOIDA provided an example of a current practice by a carrier that instructs drivers to falsify HOS records kept on EOBR-like devices, and said there was no reason for current illegal practices to change with the use of EOBRs. Advocates, and others, also noted that current practices often involve violating the HOS rules; however, in their view, ELDs could help stop those violations. A commenter stated, ''[a] lot of the fear of EOBRs seems to stem from a lack of good practices following the HOS [rules] in the first place.''

2. Comments to the 2014 SNPRM

A number of commenters were concerned that the rule would affect their current business practices. Continental stated that some carriers are opposed to an ELD mandate because they anticipate that the costs for ELDs will be high; they relate the problems associated with today's complex FMS (*e.g.,* system-to-system incompatibility, complex handling, or data privacy concerns) to ELDs; and they fear that ELDs may be a capable tool to enforce the HOS regulation (a rule they fundamentally oppose). Continental said it is likely that the majority of carriers will accept ELDs, assuming FMCSA adequately addresses some concerns. The commenter said that FMCSA effectively addressed cost and data privacy concerns. Continental also noted fleets that would not benefit from the use of FMS functionalities will not be required to use real-time communications and will be able to use ELDs without monthly fees.

Three commenters addressed the proposed requirements, in §§ 395.8 (a)(2)(ii) and 395.11(b), that RODS and supporting documents be transferred from the vehicle to the carrier's office within 8 days. Current regulations in § 395.8(i) require a driver to submit RODS within 13 days. FedEx stated that, like the 13-day time period, an 8-day time period is too long, especially given that the vast majority of logs will be created using ELDs and the proposed ELD rule requires that drivers certify their daily record ''immediately after the final required entry has been made or corrected for the 24-hour period.'' To allow carriers to better manage HOS and ensure they are not at risk of allowing a driver to operate in violation of § 395.3, FedEx recommended drivers should be required to certify and submit their HOS records to carriers within 24 hours of the end of their day. FedEx suggested that FMCSA carve out an exception for logs showing only off duty time and only require that they be turned over to the motor carrier prior to the driver performing any on duty work for the carrier.

Where trucks do not return to the main office every 8 days, Continental was concerned that this shorter timeframe may force carriers to use cell phone or satellite wireless communication for data transfer,

creating additional costs. Continental stated the requirement to send RODS to the back office should remain at 13 days.

Eclipse Software Systems stated that the requirement to file logs within 8 days will be onerous to carriers wanting to use low-cost ELDs that do not support wireless connections for data transfer, and problematic for drivers who are away from their home terminal for more than 8 days. The commenter noted that the gains in safety from such a requirement would also seem to be minimal because the most pressing compliance issues occur in real-time, when a driver is tired. According to the commenter, carriers have been operating under the 13-day submission rule for many years, and continuing with that limitation would mirror current operational patterns without penalizing users of low-cost ELD systems that experience longer trips.

The MPAA stated that FMCSA should confirm that industries in which drivers work for multiple carriers, such as the motion picture and television industry, may employ third-party administrators to coordinate ELD information and technology. The commenter believed that this approach may support the unique characteristics of production drivers better than a carrier-by-carrier approach. MPAA suggested an amendment to proposed § 395.20(c). The National Private Truck Council appreciated that the Agency clarified that carriers may use ELDs ''to improve productivity or for other appropriate business practices,'' and that the rulemaking will not ''ban or impose significant new restrictions on those functionalities.''

3. FMCSA Response

FMCSA intentionally created technical specifications that allow an ELD of limited complexity, at lower cost, and without monthly charges. Today's rule does not require real-time data transferor wireless submission of data. Based on the comments to the SNPRM, FMCSA changed some parts of the proposal to address data transfer and other issues, in order to increase the flexibility of the ELD and address multiple motor carrier business models and price points without compromising safety or data integrity.

Based on comments that reducing submission timeframes from the currently required 13 days to 8 days will interfere with current business practices, today's rule requires submission of both RODS and supporting documents to the motor carrier within 13 days. A motor carrier that wants a shorter time frame than 13 days for the submission of RODS or supporting documents already has the ability to make this request of its drivers, and today's rule does not change that. Motor carriers can require different policies so long as they are not less rigorous than the FMCSRs.

As a point of clarification, if a driver is off-duty for multiple days, the motor carrier may annotate the driver's ELD records to reflect that, subject to the driver's certification. As stated before, the only prohibition is that no time that a driver spent driving can be converted into non-driving time. Another acceptable method of noting time spent off duty would be to have the driver add this time retroactively with an annotation, at the beginning of his or her first day back on duty. Drivers who have responsibilities outside of driving should note those job-related functions in their ELDs as ODND time at the start of their driving the CMV.

Nothing in the today's rule prohibits third parties from being engaged by a motor carrier to help with HOS compliance. If the third party is engaged as an agent of the motor carrier and is involved in HOS compliance through ELD use, that person will be required to have a unique login on ELD systems. The requirement for HOS compliance ultimately lies with the motor carrier, so FMCSA does not make the suggested change to the regulatory language.

FMCSA has eliminated language that was proposed in § 395.20(c) to avoid confusion as evidenced by comments. FMCSA recognizes that different ELDs will employ different technologies, including back office systems. FMCSA does not intend to limit alternative technologies, provided that the ELD operates in a manner that satisfies the technical specifications in today's rule.

H. Leased and Rented Vehicles

1. Comments to the 2011 NPRM

Commenters asked how rented and leased trucks would be treated (*e.g.,* would a truck rental company be required to install EOBRs for its customers). A commenter explained that the occasional or seasonal use of rental vehicles is a key part of many businesses.

2. Comments to the 2014 SNPRM

The IFDA wrote that while rental units can be equipped with ELDs, they may not be the same as the system in use in other company vehicles. The commenter noted this situation raises issues concerning training and maintaining records for drivers who are using multiple systems within the same week. IFDA urged the Agency to recognize that such events are a routine aspect of daily fleet operations and allow flexibility for companies and drivers in the rule.

ATA said that FMCSA should consider the real-world challenges an ELD mandate would create for fleets using rented and leased vehicles. In the event of a breakdown, ATA explained that a motor carrier will call on its truck rental and leasing company to provide a replacement truck. It is not reasonable to expect the provider will have one with an ELD that matches the carrier's HOS management system. ATA noted that the carrier will be unable to populate the device in the replacement vehicle with the driver's RODS for the prior 7 days. Even if the driver manually populates the device, the motor carrier will not have the means to communicate and read data from it. ATA suggested that fleets using short-term replacement vehicles should be permitted to use paper RODS for more than 8 days.

Similarly, the NMFTA commented that its members are concerned about the complications and costs ELDs present when the carrier routinely requires drivers to use different pieces of equipment. LTLs often rely on the short-term use of rental equipment, and LTL carriers must constantly manage and shuffle drivers in and out of both company and temporary equipment to meet business needs. NMFTA stated different truck manufacturers install different types of data equipment, connections, and software. NMFTA noted this situation requires carriers who wish to maintain the flexibility of bringing in outside equipment on a temporary basis to invest in different types of cables and software to ensure that their office systems can integrate with it.

TRALA expressed concern about proposed § 395.26(d)(2), which requires that ELDs capture personal miles operated in a CMV. TRALA asked how the recording of personal miles of a regulated motor carrier employee will be reconciled with the personal use of rental vehicles by unregulated consumer customers or motor carrier drivers who are not subject to the ELD requirements because they are under one of the short-haul exemptions in 49 CFR 395.1(e). The commenter asserted that trip data of rental customers who are not subject to the ELD requirements, either because they are using the CMV for non-commercial purposes or are exempt short-haul operators, should not be recorded nor be available for FMCSA or State inspection.

TRALA noted that transferability allows TRALA members to use ELDs on vehicles where use is required, and to

avoid the cost of employing that technology where it is not. TRALA is concerned that its member companies may disclose their unregulated customers' geographic location as a mandatory ELD data element, or violate the proprietary nature of the HOS data recorded and stored on the ELDs by and on behalf of their regulated customers, the motor carriers. With multiple users of a single vehicle, TRALA companies could be liable for unlawful disclosure or access to such data. TRALA recommended allowing portable devices that have unique logins for each driver and strict protocols for device accessibility and information capture to alleviate this concern.

In light of the significant concerns raised by the TRALA, IFDA, and others, the American Truck Dealers Division of the National Automobile Dealers Association urged FMCSA to clarify in the rule that lessors and rental companies bear no responsibility for providing or installing ELDs in leased or rented CMVs operated by CDL holders employed by unrelated motor carriers.

3. FMCSA Response

Because today's rule provides a performance-based standard for ELDs, motor carriers will have a number of options to choose from the market place of ELD providers. This includes portable units that stay with the driver as opposed to being installed in the vehicle. Motor carriers that rely upon long-term leases of CMVs can work with the leasing companies to identify options and implement solutions to the challenge of using ELDs with leased vehicles. Therefore, the Agency has not included in today's rule an exception for leased or rented CMVs.

If a driver who is not required to use an ELD were to operate a motor vehicle that is equipped with an ELD, that driver would not have to use the ELD. This would apply to a driver operating under the short-haul exception in § 395.1(e) or to a private individual using a rented truck to move his or her own household goods. A company renting a truck to an unregulated consumer could protect that customer's information by removing the ELD or removing any recorded information from the ELD.

FMCSA does not regulate truck-rental companies. There is no requirement or prohibition for a rental agreement or short-term lease to include an ELD. A rental company might choose to include an ELD as a part of the agreement, just as they might include another piece of equipment.

I. Business Relationships With Owner-Operators

1. Comments to the 2011 NPRM

In addition to concerns related to harassment (addressed elsewhere in this preamble), commenters believed that ELDs could affect the relationship between motor carriers and the owner-operators with whom they contract. An owner-operator said that the devices allow corporations to micromanage. Another owner-operator said that the use of EOBRs could lead to drivers being paid by the hour rather than the mile. One commenter stated ''absent uniform compatibility profiles and mandates, EOBRs installed on owner-operator units would only necessitate additional installation costs and the incurring of unused vendor contracts as owner-operators elect to move from one carrier to another which is their right to do so in a free market on a regular basis.'' Another commenter wanted to know what system would be required if the driver contracted to multiple motor carriers.

2. Comments to the 2014 SNPRM

United Van Lines, LLC (United) and Mayflower Transit, LLC (Mayflower), responding together, and AMSA, said a carrier's obligations related to the use of ELDs should not be a factor in determining whether a lessor is an independent contractor or an employee for Agency determination purposes and recommended that FMCSA amend § 395.20 to reflect that.

United's/Mayflower's disclosed household goods agents may typically contract with non-employee, owner-operators (''drivers'') who own or lease their CMVs. United/Mayflower did not believe that their companies bear any responsibility for the drivers' compliance with HOS regulations when the drivers are not driving under their respective authorities.

United/Mayflower believed the proposed rules would require them to install ELDs in drivers' CMVs when operating under their authorities and, subsequently, to remove the ELDs. United/Mayflower believed that the proposed rules permit them to require drivers operating under their operating authorities to install ELDs owned by United/Mayflower, even if the drivers have already installed and are using their own ELDs in their CMVs.

3. FMCSA Response

The Agency understands that there are many types of relationships between owner-operators and motor carriers. This rule does not change the relationship between employee and employer or carrier and contractor. This rule does not change the underlying requirement to comply with HOS. The responsibility for complying with HOS, including through the use of an ELD, lies with both the driver and the motor carrier.

FMCSA declines to amend the language of § 395.20, as suggested by the commenters. The independent contractor relationship is outside the scope of this rulemaking.

J. Carrier Liability

1. Comments to the 2011 NPRM

Several commenters to the NPRM, including J.B. Hunt, stated that EOBR use would help motor carriers lower risk and liability because they would record more information and lower the crash risk. Commenters also stated that access to a driver's records through an EOBR would help decrease liability, as the carrier and driver could plan routes together to avoid delays. Other commenters spoke of benefits as a result of minimizing the carrier's liability while the CMV is being used for personal purposes.

2. Comments to the 2014 SNPRM

AMSA and United/Mayflower stated that ELDs will be required to automatically record a limited set of data points. However, ELDs being marketed to the trucking industry by ELD system providers are able to, and do, collect significantly more data than required under the rule. Examples of source data streams include, but are not limited to, measurements of a driver's speeding, hard braking, and idling. These data are recorded even when the drivers are not under dispatch for a carrier. The proposed rule forbids carriers from altering or erasing the original source data. This means that even if a carrier elects not to view reports including data points that are not required by the rules, it must not seek or permit the destruction of the extraneous data collected by the devices.

AMSA and United/Mayflower were concerned that the mandated retention of the additional data will lead to an unintended increase in carrier liability. These commenters anticipated that certain lawyer groups will second-guess FMCSA's judgment and carriers' reliance on the information requirements imposed by the proposed regulations by arguing that carriers had a ''duty'' to access and use the additional data created by ELDs. United/Mayflower proposed that FMCSA add new language that clarifies

that the motor carrier would not be responsible for accessing such data.

These commenters also asked that FMCSA provide guidance that removes any ambiguity concerning the application of proposed regulations prohibiting alteration or destruction of data streams and reaffirm that drivers not placed out of service are authorized for use.

3. FMCSA Response

FMCSA believes that transparency and increased control over a driver's records by the driver is beneficial to the carrier-driver relationship. FMCSA notes that commenters appear to focus on a device that goes beyond the minimum requirements of this rulemaking, but is still part of an ELD-like device, such as an FMS. Though it does not have a regulatory definition, any device that has the capabilities of an ELD, like an FMS, is bound by the same recording and editing requirements and prohibitions as an ELD in terms of required data elements. While an extended data set might be recorded by an FMS, the items in it are not part of the driver's electronic RODS that are required to be transferred to an authorized safety official. Information like hard braking or other events would not be a part of that required data set. See also Section IX, C, Privacy; Ownership and Use of ELD Data, for information on the use of data provided by an ELD.

Today's rule does not change motor carriers' existing obligation to ensure its drivers' comply with HOS regulations. The Agency does not believe that this requirement is ambiguous. However, the Agency does not address data elements that are not required as part of the minimal technical standards for an ELD. Nor does the Agency have the authority to address through its regulations the use of evidence in civil litigation.

K. Safety Study

1. Comments to the 2014 SNPRM

On May 12, 2014, FMCSA announced the availability of a study concerning the safety benefits of ELD-like devices: ''Evaluating the Potential Safety Benefits of Electronic Hours-of-Service Recorders'' (Safety Study). It quantitatively evaluated whether trucks equipped with devices like ELDs had a lower (or higher) crash and HOS violation rate than those without such devices (May 12, 2014, 79 FR 27040). The study is available in the docket for this rulemaking.[36]

An ELD provider was the only commenter who agreed with the Safety Study's finding that ELDs provide safety benefits. The remaining 21 commenters criticized the Safety Study. One commenter provided crash and fatality data for motor carriers that use ELDs, and noted that carriers with ELDs are still involved in crashes. Another commenter claimed that most traffic fatalities are not caused by large trucks, therefore, the ELD mandate is unnecessary. OOIDA provided a detailed critique of the Safety Study's data and concluded that, ''FMCSA has no credible data on the relationship between the use of ELDs and actual HOS compliance, and even less data on the relationship between HOS compliance and highway safety.''

According to OOIDA, the 2014 Safety Study lacks reliability for numerous reasons, including because it is taken from the records of carriers with differing recording criteria. OOIDA criticized the study for failing to provide sufficiently detailed information about how the data inconsistencies were reconciled and for including crashes that OOIDA believed could not have been avoided by drivers. OOIDA wrote that the number of HOS violations included in the 2014 Safety Study is not consistent with the violation data in FMCSA's Safety Measurement System. OOIDA claimed that the Safety Study data did not include on-board recording device violations. OOIDA also criticized the study for the small sample size, failure to include small carriers, and failure to account for how trucks are selected for inspection. OOIDA noted that although 97 percent of all carriers have fleets with 20 or fewer trucks, 9 of the 11 carriers in the Study maintained fleets with more than 1000 trucks while the remaining two carriers had fleets with between 100 and 500 trucks.

OOIDA stated that the Safety Study's failure to control for the effects of ELD use on inspection frequency biased the results. Based on its own survey and the anecdotal evidence it collected, OOIDA claimed that trucks with ELDs are less likely to be inspected for HOS violations than trucks without ELDs. In OOIDA's survey, 39 percent of the 2,347 respondents reported seeing ''a law enforcement official passing on inspecting another driver's logs because the truck was equipped with an EOBR/ELD. Further, numerous responders reported that in addition to just passing on inspection, officers did not know how to operate EOBRs/ELDs.'' According to OOIDA, trucks in the study with ELDs had lower HOS violation rates because they were less likely to be selected for inspection than trucks without ELDs.

OOIDA objected to the study's conclusion that ELDs have clear safety benefits. OOIDA cited one of its own surveys that compared the safety record of carriers with speed limiters and electronic logging devices to carriers without those monitoring devices. Using FMCSA/CSA data, OOIDA concluded that carriers without electronic monitoring had a better crash ratio than monitored carriers.

2. FMCSA Response

While the Agency acknowledges commenters' concerns about the study, we did not rely on its conclusions to establish the safety benefits of ELDs relative to paper logs. The Safety Benefits Analysis in the RIA uses a different measure of HOS violation rates, a different data set and a different study design to demonstrate a reduction in HOS violations attributable to ELD use. The Safety Study did, however, provide corroborative data to support the crash reduction estimates used in this rulemaking.

FMCSA notes that the crash data in the Safety Study were vetted by analysts to ensure consistency across carriers. The Safety Study received two types of crash files from participating carriers—those with only crashes and those with crashes plus claims data. To ensure the crash data was comparable across carriers, data analysts removed all claims data according to procedures described in the study. The report includes examples of claims. However, the report does not separately describe each specific claim in the original carrier data.

As indicated in the report, all of the HOS violations from the participating carriers were collected from FMCSA's Safety Measurement System Web site during a short portion of 2010 and all of 2011 and 2012. All categories of HOS violations were included in the analysis, although some HOS violations that could not be linked to a specific truck in the study were dropped from the analysis.

The study clearly acknowledged that its sample was skewed toward large, for-hire carriers. However, because the study was designed to compare trucks with and without ELDs owned by the same carrier, large carriers provided the best set from which to obtain this data. Any bias toward a specific carrier or type of carrier would equally affect trucks with and without ELDs.

The study applied statistical techniques to identify and measure the

[36] In the docket for this rulemaking, docket number FMCSA–2010–0167–0900, *http://www.regulations.gov/#!documentDetail;D=FMCSA-2010-0167-0900.*

effects of ELD use separately from the many other factors that affect crash rates. As with any study, the Safety Study could not completely eliminate all potential sources of bias. Although the study was able to control for carrier factors that might affect selection for roadside inspection, the study did not address the relationship between ELD use and the likelihood a truck would be selected for inspection. The Safety Study measured HOS violation rates as the ratio of HOS violations to millions of vehicle miles travelled. If trucks with ELDs were less likely to be inspected per mile traveled then the study would overestimate the reduction in HOS violations due to ELD use. By contrast, the safety benefits analysis in the RIA measured HOS violations *per inspection* and found a significant reduction in HOS violations in a before and after comparison in a group of carriers that had implemented ELDs at a certain time. OOIDA's claim that the Safety Study data did not include on-board recording device violations is incorrect; the Safety Study did include these violations.

In reviewing the data presented by OOIDA, FMCSA notes that those studies did not control for numerous other factors that affect crash or violation rates. In addition, OOIDA's survey data showing that roadside inspections of ELD-equipped CMVs are routinely waived is subject to its own selection bias. FMCSA continues to believe that the safety benefits estimates presented with the SNPRM were appropriate and supported by the research the Agency sponsored.

The Safety Study focused on estimating the effects of ELDs on outcome measures of safety, such as crash rates, rather than process measures, such as violation rates and fatigue. The study found a significant reduction in the overall crash rate and the preventable crash rate for trucks with ELDs compared to trucks without ELDs. Due to limited data, the study could not evaluate the effect of ELDs on DOT-reportable and fatigue-related crashes.

L. Harassment Survey

1. Comments to the Survey

FMCSA conducted a survey to examine the issue of driver harassment and to determine the extent to which ELDs are used to either harass drivers or monitor driver productivity. The research explored the relevant issues from the perspective of both drivers and carriers. On November 13, 2014, FMCSA published a notice of availability for the survey in the **Federal Register** (79 FR 67541). In that notice, FMCSA re-opened the public docket for this rulemaking for the limited purpose of soliciting comment on this survey.

The report titled, ''Attitudes of Truck Drivers and Carriers on the Use of Electronic Logging Devices and Driver Harassment'' (the Harassment Survey),[37] summarized the survey findings. The survey explored driver's attitudes about harassment and whether harassment is more prevalent for drivers using ELDs. The survey had seven major findings in the following areas:

1. Interactions which drivers consider harassment.
2. Frequency of experiencing interactions considered harassment.
3. Whether harassing experiences are associated with ELDs.
4. Whether drivers who use ELDs have different experiences than those who use paper.
5. Nature of attitudes toward ELDs.
6. Whether the perspectives of carriers are substantially different from drivers.
7. Reactions to FMCSA definitions of harassment and coercion.

Of the 13 comments that FMCSA received in response to the notice of availability, 9 commenters did not address the report; rather, they expressed their opposition to the ELD mandate, the HOS rules, or both. Advocates and ATA agreed that the data indicates that drivers' experience of harassment is unlikely to be affected by ELD use. ATA also stated that the survey's findings that instances of harassment are uncommon are consistent with ATA members' experiences. However, ATA expressed concern that in the report FMCSA represented some scenarios as harassment, such as waiting time delays and driver compensation issues, that are, in fact, not related to harassment. ATA further noted that FMCSA's definition of harassment does not refer to waiting time or how drivers are paid, nor has Congress suggested that harassment should include delays caused by customers.

The Snack Food Association addressed concerns about the driver harassment and coercion rulemakings. The commenter stated the results of FMCSA's survey report suggest ''that coercion or harassment of drivers is not a significant issue impacting motor carrier safety,'' thereby undermining the need for regulation. Should the Agency establish a connection between driver harassment or coercion and motor carrier safety in the future, the Snack Food Association recommended that FMCSA use enforcement tools under existing regulations to address the issue.

In its comments on the Harassment Survey, OOIDA raised several issues concerning the ELD rulemaking, including FMCSA's responsibility to ensure ELD's are not used to harass drivers and the demonstrated use of ELDs by motor carriers to harass drivers. OOIDA cited language in the ''Notice'' section, on page 2 of the report, that indicates the report does ''not necessarily reflect the official policy of the USDOT,'' nor does it ''constitute a standard, specification or regulation,'' as suggesting that the Agency has distanced itself from the results of the study and ''disavows responsibility for the accuracy of the data in the report.'' The commenter pointed out that the report did not provide information on the background or qualifications of the contractor or the authors of the report, information about the Agency's direction to the contractor regarding the research, and the raw data from the survey. OOIDA also noted the report is not peer reviewed and FMCSA has not made any official statement recognizing or adopting any findings of the study.

OOIDA contended the survey framework and terminology differ from the statutory requirements for ELDs set forth in 49 U.S.C. 31137(a) (2012). For example, OOIDA stated FMCSA's duty to ensure ELDs are not used to harass drivers does not require the finding of any particular level of harassment, or a comparison of the level of driver harassment by motor carriers using ELDs versus instances of harassment when paper log books are used. However, the commenter stated the survey compares reports of harassment between AOBRD users and paper log users. Although language related to the use of ELDs to monitor productivity is not included in the current version of the law, OOIDA wrote ''the survey report spends excessive time on productivity issues.'' The commenter also took issue with the definitions of ''harassment'' and ''coercion'' used in the survey, stating that the statute does not require that harassment result in any driver violation. Similarly, OOIDA noted the survey definition of coercion requires the offending conduct be based on the denial of business or work, but the statute does not include such a requirement.

OOIDA asserted the survey methodology likely resulted in under reporting instances of driver harassment. One source of under

[37] The Harassment Survey is available in the docket for this rulemaking; it is docket number FMCSA–2010–0167–2256. It is also available on line at: *http://ntl.bts.gov/lib/54000/54100/54178/RRR-14-009-Attitudes_of_Truck_Drivers_and_Carriers_on_the_Use_of_ELDs_and_Harassment-V11-FINAL.pdf.*

reporting is the result of the survey being based on self-reporting rather than direct observation. OOIDA noted motor carriers are not likely to admit to unlawful driver harassment, and drivers are unlikely to admit that they were a victim of harassment, particularly when it might implicate them in a violation.

OOIDA also contended large motor carriers are strong supporters of ELDs and, therefore, more likely to report positive results with respect to ELD use. OOIDA argued that large motor carriers were the subject of the survey. According to OOIDA, although motor carriers with 10 or fewer trucks make up 92 percent of registered motor carriers, they made up only 2 percent of the survey.

OOIDA expressed concern about the quality of the survey data, stating that the survey only partially focused on driver harassment. The commenter explained that of the total of 14 questions asked of respondents, 7 questions have no connection to ELDs or harassment, 3 other questions relate to harassment, but have no relationship to ELDs, and only 4 questions relate to motor carrier use of ELDs to harass drivers. However, OOIDA stated, the four relevant questions were asked in generic terms that suggested unlawful behavior, but they were not presented in the context of a real-world example that might be meaningful to drivers. OOIDA said comparing the data associated with responses to generically worded questions to data associated with responses to questions that used more specific language supports its concern.

Although the report characterized the instances of driver harassment as few on a percentage basis, OOIDA believed the evidence shows significant use of ELDs to harass drivers in terms of raw numbers. Applying the report's percentages to the 2.3 million drivers who would be covered by the proposed ELD rulemaking, OOIDA's analysis showed, at least once a month, motor carriers changing the duty status of more than 98,000 drivers, contacting more than 206,000 drivers and asking why their truck was not moving, and asking 276,000 drivers to operate when fatigued. OOIDA asserted this data illustrates that motor carriers would use ELDs as a tool to ask drivers to operate longer hours than the driver's professional judgment will support. Furthermore, OOIDA believed the study documents the serious problem of harassment requiring a serious regulatory response.

OOIDA contended FMCSA's proposed rules do not take into account the record it has made on the current use of ELDs to harass drivers. It stated it expects FMCSA to review its pending proposed ELD rules to address the record it has now made with this study.

OOIDA stated that the record for the proposed rulemaking is deficient because it lacks information and analysis on the survey, and because the public has not had an opportunity to react to, and comment on, the survey. As described in the SNPRM, OOIDA noted that FMCSA initiated a survey of drivers and motor carriers regarding the use of e-logging devices to harass drivers, but a report on the results of that survey is not due until 2 months after the close of the comment period for the SNPRM. OOIDA asserted that it was this type of defect in a rulemaking process that caused the U.S. Court of Appeals for the DC Circuit to overturn the HOS rules in July 2007. OOIDA stated that to remedy this problem and comply with the Administrative Procedure Act, FMCSA must be prepared to publish the data collected by the survey and its analysis of that data, and welcome another round of comments so that interested parties may properly address the driver harassment issue.

3. FMCSA Response

In accordance with the Paperwork Reduction Act of 1995, FMCSA announced its plan to submit an ICR to OMB and asked for comments in **Federal Register** notices on December 13, 2012 (77 FR 74267) and May 28, 2013 (78 FR 32001). Both of these notices provided the name and complete contact information for the contractors who conducted the survey. That information is also in the study report itself, and available at: *http://ntl.bts.gov/lib/54000/54100/54178/RRR-14-009-Attitudes_of_Truck_Drivers_and_Carriers_on_the_Use_of_ELDs_and_Harassment-V11-FINAL.pdf* .

The study objectives are set out in the report. In addition the December 13, 2012, and May 28, 2013, notices spelled out the objectives clearly and provided opportunity for comment. Two peer reviews were conducted—the first on the study design and methodology and the second on the actual findings and presentation. Further, the study methodology was reviewed through the OMB Paperwork Reduction Act and ICR processes.

OOIDA contended that the survey framework and terminology and the definitions of ''harassment'' and ''coercion'' used in the survey differ from the statutory requirements. The harassment element of the survey was premised on the opinion of the United States Court of Appeals for the Seventh Circuit, addressing this matter. *Owner-Operator Indep. Drivers Ass'n* v. *Fed. Motor Carrier Safety Admin.,* 656 F.3d 580, 588–89 (7th Cir. 2011). The Agency's obligation to consider coercion in certain rulemakings was subsequently enacted as part of MAP–21. 49 U.S.C. 31136(a)(5). Neither term is defined by statute. Although OOIDA objected to survey time spent on productivity issues, those issue were included because the circuit court explicitly addressed productivity. FMCSA responded to OOIDA's concerns about the definitions of harassment and coercion in the May 28, 2013, notice addressing the Agency's ICR under the Paperwork Reduction Act (78 FR 32001).[38] Further, Congress eliminated the statutory reference to productivity in enacting MAP–21 and the Agency does not regulate productivity in this rule (other than to clarify that productivity measures undertaken by carriers cannot be used to harass drivers).

FMCSA acknowledges OOIDA's concern that neither drivers nor motor carriers may disclose harassment when it might implicate them in a violation. However, every reasonable step was taken in the survey to ensure the anonymity of drivers. They were assured that no one would be told of their participation or their answers. The sheet they signed acknowledging questionnaire topics was kept separate from the surveys. Participation was not mandatory, which was explained to the drivers and written on the sheet. Carrier personnel were included in the survey because they interact with drivers and because their perspective on harassment is relevant to FMCSA.

OOIDA criticized the survey questions because, in their view, only four questions relate directly to the use of an ELD by a motor carrier to harass a driver. The questions were formulated to include a list of interactions which includes items seen as both positive and negative, which helped to ensure that the list was not biased. Second, the opinions of what is beneficial can vary. The wording of questions was pre-tested in a series of in-depth interviews with a random set of drivers. Comprehension of the items was confirmed, and drivers were also asked whether there was anything else they considered harassment that was not on the list of what had been asked.

The report characterized instances of driver harassment as ''few'' when considered on a percentage basis. Based on an estimate of 2.3 million drivers, OOIDA applied the percentages in the report to the affected population of

[38] OOIDA's comment on the December 13, 2012, notice is available in docket FMCSA–2012–0309.

drivers and concluded that many drivers are affected by harassment. This extrapolation may or may not be accurate, since confidence intervals were not provided for the incidence of harassment.

OOIDA recommended that FMCSA identify current Federal and State enforcement practices and rules that protect drivers from harassment and coercion. At least nine questions in the survey addressed this very issue, including question 32, which specifically asked drivers to rate the effectiveness of Federal regulations.

FMCSA conducted the Harassment Survey to better understand drivers' and carriers' perceptions of harassment. FMCSA posted the report on the survey in the rulemaking's public docket and opened the rulemaking for public comment on the report (November 13, 2014, 79 FR 67541). The Agency considered the results of the survey, as well as comments on the report, as part of the rulemaking process. The Agency relied on both the survey results and the responsive comments to inform this rule.

M. Legal Issues—Constitutional Rights: Fourth and Fifth Amendments

1. Fourth Amendment

Comments to the 2011 NPRM

Numerous commenters to the NPRM claimed that the proposed rule violates the Fourth Amendment of the United States Constitution in that the required use of an electronic recorder results in an unreasonable search and seizure and an invasion of a driver's right of privacy.

Comments to the 2014 SNPRM

Similar Fourth Amendment arguments were submitted in response to the SNPRM. A majority of these commenters stated that the ELD mandate would be an invasion of privacy rights. Comments included statements such as one noting that requiring an ELD results in a sustained illegal search without a warrant and a search of property (including data and personal information) without permission or reasonable cause. One commenter noted that, when an agent of a government can stop your vehicle and download your whereabouts over the last several weeks, you have lost your privacy. Two commenters pointed out that the Supreme Court recently ruled that authorities must have a warrant to obtain cellular phone data. Those commenters noted that mandatory tracking and monitoring of CMV drivers with ELDs is the same thing and should require a warrant. Several commenters pointed out that the ELD mandate is particularly invasive because most drivers spend a significant amount of time in their trucks and view them more as homes. Commenters pointed out that 24-hour audio and visual monitoring would be particularly offensive to husband and wife teams who live in their trucks.

Another commenter stated that there needs to be a way for enforcement personnel to view logs from outside of trucks, because he would not give enforcement personnel permission to enter his truck without a search warrant. Another commenter pointed out that the government does not drug test every citizen to ensure compliance with drug laws, or put GPS trackers on all vehicles on the highway, or put ignition interlocks on all vehicles to deter driving while intoxicated, or read every piece of mail or listen to every phone call, because it would be unconstitutional to do so; likewise, required use of an ELD is unconstitutional. Commenters stated that the government should not mandate ELDs on CMVs unless it is willing to mandate such devices for every form of transportation.

OOIDA provided the most extensive analysis addressing why, in its view, the required use of ELDs runs afoul of the Fourth Amendment. OOIDA noted that the Fourth Amendment applies to both criminal and civil cases and proscribes unreasonable searches and seizures. OOIDA pointed to Federal case law to support the conclusion that prolonged and systematic tracking of drivers using ELDs constitutes a search under the Fourth Amendment. OOIDA first pointed to a Supreme Court case, *United States* v. *Knotts,* 460 U.S. 276 (1983), in which the Court held that the short term use of a simple beeper device to track the movement by truck of a 5-gallon drum of chloroform used in drug manufacturing was not a search. OOIDA noted that the *Knotts* case presents a very narrow ruling under facts that are easily distinguished from the proposed use of ELDs. OOIDA also cited to subsequent case law where Federal courts declined to apply the *Knotts* ruling beyond the narrow confines of the facts presented in that case.

OOIDA next stated that the use of ELDs to monitor driver behavior is not covered by the ''pervasively regulated business'' exception to the warrant requirement articulated by the Supreme Court in *New York* v. *Burger,* 482 U.S. 691, 702–703 (1987). OOIDA explained that the Supreme Court concluded in *Burger* that where (1) the business in question is closely regulated, and (2) the warrantless inspections are necessary to further the regulatory scheme, then (3) compliance with the Fourth Amendment turns on whether the inspection program, in terms of the certainty and regularity of its application, provides a constitutionally adequate substitute for a warrant.

OOIDA stated that the proposed use of ELDs does not involve the inspection of ''commercial premises,'' but, rather, involves the systematic tracking of the movement of individual drivers over extended periods of time by the use of sophisticated electronic devices in order to enforce compliance with HOS regulations. OOIDA pointed out that neither *Burger* nor any of the cases implementing the pervasively regulated industry exception stand for the proposition that individuals working in a pervasively regulated industry may be personally subjected to continuous surveillance by sophisticated monitoring devices over long periods of time without a warrant.

OOIDA also argued that the proposed use of ELDs does not fall within the pervasively regulated industry exception because it does not satisfy the second prong of the *Burger* test—*i.e.,* that the search be necessary to accomplish regulatory goals. In support of its argument, OOIDA noted that, according to FMCSA, government interests at issue in this rulemaking are to improve compliance with various HOS rules; to make the operation of CMVs safer; and to improve drivers' opportunities for rest. OOIDA asserted that the record presented does not support the conclusion that FMCSA's regulatory goals are furthered by the ELD mandate, arguing that drivers must manually enter changes in duty status into an ELD, which makes the device no better than paper logs. OOIDA also stated that FMCSA is completely unable to support its safety claims with current, reliable data.

FMCSA Response

FMCSA disagrees that the required use of ELDs violates the Fourth Amendment. For more than 75 years, CMV drivers engaged in interstate commerce have been required to keep paper logbooks as part of their compliance with HOS rules. Under current regulations, the log must show, among other information, the driver's duty status (on duty, on-duty driving, sleeper berth, off duty) and the general location of any change in duty status. Although an ELD will record driving time information automatically (including date, time and location for any transition into or out of driving time) and collect location information at intermediate intervals, only the methodology changes; the fundamental

data and the purpose of data collection remains unchanged. To be sure, an ELD collects additional data elements (such as engine on, engine hours), but the minimal expansion is aimed at ensuring the authenticity of the driver's data. While technology such as GPS can generate a ''precise comprehensive record of a person's public movements'' that reflects a wealth of personal information (*United States* v. *Jones,* __ U.S. __, 132 S. Ct. 945, 955 (2012) (Sotomayor, J., concurring)), the rule does not provide for presentation of this level of precision to authorized safety officials. Rather, the Agency has deliberately limited the location information shared with authorized safety officials to avoid specific proximities, and is recorded at varying prescribed intervals rather than real time reporting—measures taken to address drivers' privacy concerns. While ELDs would generally replace paper logs, a change required by statute, the basic premise, that is, prescribing a method of policing a driver's compliance with HOS regulations, remains unchanged. An ELD records data only during operation of a CMV and drivers have no reasonable expectation of privacy in the data captured during that period.

The Fourth Amendment provides, in part, that, ''[t]he right of the people to be secure in their persons, houses, papers, and effects, against unreasonable searches and seizures, shall not be violated.'' A Fourth Amendment search occurs when the government invades a person's privacy interests that society recognizes as reasonable or seeks to obtains information by physically intruding on a constitutionally protected area. *United States* v. *Jones,* __U.S. __, 132 S. Ct. 945 (2012). Commenters argued that required use of an ELD results in an unconstitutional search. (No commenter argued the use of ELDs involved a seizure.) However, commenters arguing that a Fourth Amendment violation results from the required use of ELDs rely largely on case law addressing law enforcement's use of technology for surveillance purposes, thus without the subject's knowledge, or searches of property conducted incident to arrests. FMCSA believes these cases are inapposite. Given that ELDs are employed by motor carriers pursuant to a Federal regulatory requirement and drivers are aware of their use, there is no trespass or infringement of a reasonable expectation of privacy. Thus, there is no search for purposes of the Fourth Amendment. *Cf. El-Nahal* v. *Yassky,* 993 F.Supp.2d 460 (S.D.N.Y. 2014) (required use of technology, including GPS, under municipal regulatory scheme governing taxicabs did not result in a search under Fourth Amendment).

Commenters also referenced a recent Supreme Court decision holding that authorities required a warrant to view data captured on a cell phone that they compared to an ELD. The case referenced, *Riley* v. *California,* __U.S. __, 134 S. Ct. 2473 (2014), involved searches of cell phone data incident to arrests; thus, it is clearly distinguishable from the required use of ELDs.

Even if we assumed that requiring the collection of data through an ELD and sharing that information with authorized safety officials qualified as a search, the commenters fail to recognize that not every search is unreasonable for purposes of the Fourth Amendment. Notwithstanding comments to the contrary, it is well established that interstate commercial trucking is a pervasively regulated industry. See *United States* v. *Castelo,* 415 F.3d 407, 410 (5th Cir. 2005), and *United States* v. *Maldonado,* 356 F.3d 130, 135 (1st Cir. 2004) (applying *New York* v. *Burger,* 482 U.S. 691 (1987)), concluding that interstate commercial trucking is a pervasively regulated industry, capable of supporting recourse to an administrative search exception. The nature of its regulation justifies treating motor carriers and CMV drivers differently from the population at large. Although some commenters draw an analogy between a driver's truck and the driver's home, the Supreme Court has long recognized that an individual's expectation to privacy in a private vehicle is less than that in a home (*Preston* v. *United States,* 376 U.S. 364, 366–367 (1964)). The privacy interests of CMV drivers are clearly diminished given the nature of the commercial trucking industry (*Int'l Bhd. of Teamsters* v. *Dep't of Transp.,* 932 F.2d 1292, 1300 (9th Cir. 1991) (upholding DOT drug testing regulations)). OOIDA notes that case law addressing the pervasively regulated industry does not support the proposition that individuals working in the industry may be subject to continuous surveillance over long periods of time absent a warrant. However, that argument ignores that ELD-related monitoring is limited, tied to a driver's compliance with HOS rules while operating a CMV. Although the methodology is new, the required monitoring of hours has been in place over 75 years.[39]

As to the concern about authorized safety officials entering the CMV, the technical specifications in today's rule require that an ELD without a printer be designed so that its display may be reasonably viewed by an authorized safety official outside of the vehicle. Some commenters' Fourth Amendment concerns reflected a misunderstanding of the rule. For example, at no point did the Agency propose constant audio and visual monitoring of drivers. In sum, the Agency believes that commenters' Fourth Amendment objections are not supported by the relevant case law as applied to today's rule.

2. Fifth Amendment

Comments to the 2011 NPRM

Several commenters said that requiring the use of EOBRs violates drivers' rights under the Fifth Amendment of the United States Constitution.

Comments to the 2014 SNPRM

In responding to the SNPRM, OOIDA elaborated on its Fifth Amendment concerns, claiming that the required use of ELDs violates drivers' right of due process through an imposition of ''an unconstitutional deprivation of a driver's freedom of movement.'' It described the SNPRM as ''provid[ing] for electronic monitoring combined with, effectively, a curfew.'' According to OOIDA, electronic monitoring is imposed without any determination of an individual driver's risk to public safety. OOIDA notes that the ''right of procedural due process requires an individual hearing for each person to determine whether electronic monitoring plus a curfew (restricting the accuser's [sic] right to freedom of movement) was reasonable and necessary to meet the government's interest.'' In support of its position, OOIDA relies on a series of Federal district court cases finding that automatic electronic monitoring and curfews imposed as a condition of bail, required under the Adam Walsh Child Protection and Safety Act of 2006[40] for certain violations involving minors, are unconstitutional.

[39] OOIDA also argued that the ELD requirement does not satisfy an exception to the warrant requirement applicable to situations involving special needs beyond the needs of ordinary law enforcement. Given the Agency's position that required use of an ELD is not a ''search'' for purposes of the Fourth Amendment but, even if it were considered a search, it is justified under the exception for administrative searches in a pervasively regulated industry, we do not address this argument.

[40] Public Law 109–248, Title II, sec. 216, 120 Stat. 587, 617 (July 27, 2006).

FMCSA Response

OOIDA and other commenters stated that the ELD mandate is akin to a criminal penalty that unlawfully restricts a driver's freedom of movement. OOIDA's reliance on cases under the Adam Walsh Child Protection and Safety Act is misplaced. That Act requires continuous electronic monitoring by the government of individuals who have been charged, but not convicted, of certain crimes involving minors. The statute's very purpose is to track and restrict the *individual's* movement without any procedural review of the risk posed by the individual charged. In contrast, today's rule requiring ELDs, applicable to certain individuals electing to operate CMVs as part of a pervasively regulated industry, does not require constant monitoring of individual drivers. It simply replaces a long-standing existing process under which drivers have been required to manually track their time to demonstrate compliance with HOS rules with an electronic recording system. There is no automatic electronic monitoring once a driver steps out of the CMV.

Although other comments did not fully explain how the Fifth Amendment would be violated, it appears that their concerns related to access to the HOS records and the right against self-incrimination. The commenters, however, ignored established law that provides an exception to the Fifth Amendment privilege against self-incrimination for records that are required to be kept by law such as the HOS rules. Driver HOS records, whether in the form of a paper log book or data captured by an ELD, fall under this exception. By engaging in a regulated industry, a driver waives any privilege related to the production of required records (*Thomas* v. *Tyler,* 841 F. Supp. 1119 (D. Kan. 1993)).

In sum, commenters' Fifth Amendment arguments lack merit.

N. Short Movements or Movements Under a Certain Speed and Personal Use of a CMV

1. Comments to the 2011 NPRM

The NPRM relied upon the technical specifications from the April 2010 rule. Those specifications did not address the issue of short movements or movements under a certain speed and for personal use.

2. Comments to the 2014 SNPRM

In the SNPRM, FMCSA sought comments on how short movement, such as movements within a terminal, similar slow movements, and yard movements by other drivers, should be logged. FMCSA proposed that the ELD would provide the capability for a driver to indicate the beginning and end of two specific categories: Personal use of a CMV and yard moves, where the CMV may be in motion but a driver is not necessarily in a ''driving'' duty status. If a motor carrier allowed drivers to use a CMV for personal conveyance or yard moves, the SNPRM proposed that a driver's indication of the start and end of such occurrences would record a dataset; but the ELD would not indicate these as separate duty statuses. If a driver used a CMV for personal conveyance, the ELD would not record that time as on-duty driving.

FMCSA did not define a specific threshold of distance or time traveled for a driver to be able to use the personal conveyance or the yard movement provisions. Instead, authorized motor carrier safety personnel and authorized safety officials would use the ELD data to further explore and determine whether the driver appropriately used the indicated special category.

ATA stated that FMCSA's modified proposal represents a reasonable middle ground. Carriers will have a record of all vehicle movements but will be able to distinguish those that should be legitimately recorded as driving time from those should not. Further, it will help law enforcement identify true driving time violations, while at the same time providing visibility to yard and personal conveyance movements in the event they are unreasonable or excessive.

Defining Yard Moves and Personal Conveyance

Schneider recommended ''yard moves'' be defined, as did inthinc. Schneider noted this term, which is used in § 395.28 under ''special driving categories—other driving statuses,'' requires a clear definition. Without a definition, Schneider asserted, there will be inconsistency in the use of this status that will create issues during roadside enforcement. Schneider suggested defining ''yard move'' to mean ''an on-duty not driving activity where all driving is done within an area that does not allow for any public access.''

CVSA recommended that FMCSA define the term ''personal conveyance'' in 49 CFR 395.2 as ''an unladen commercial motor vehicle (CMV) . . . used by a driver, while in an ''off-duty'' status and when the utilization of a motor carrier's CMV is necessary for personal transportation, and for a short distance.'' CVSA would consider ''short distance'' travel to and from the nearest lodging or restaurant facilities in the immediate vicinity. ''Personal conveyance'' would also include use of a motor carrier's CMV to travel from a driver's home to his/her terminal (normal work reporting location), or from a driver's terminal (normal work reporting location) to his/her home. In any case, this distance could not exceed the lesser of 25 miles or 30 minutes. Schneider supported this definition.

Comments on the Practical Application of the Rule

Through testing with hundreds of drivers, Schneider found that having driving status trigger only off of a speed threshold without an additional mileage threshold is detrimental to the ELD. It recommended that FMCSA change the appendix to subpart B of part 395, section 4.3.1.2, paragraph (1) to read ''[o]nce the vehicle speed exceeds the set speed threshold OR the vehicle travels more than 1.5 miles, it is considered in motion.'' The commenter believed this avoids the potential for a tractor to move 20 miles at 2 miles per hour without showing any driving time. Also, in section 4.3.1.2, paragraph (2), Schneider suggested the vehicle should be considered stopped when the speed reaches 0 miles per hour AND the unit stays at 0 miles per hour for 5 minutes, rather than the proposed ''3 consecutive seconds.'' Commenter wrote that to leave the threshold at 3 seconds as the rule proposes will result in invalid duty status changes.

AGC urged the Agency to include a provision allowing short vehicle movements within a closed facility (*e.g.,* less than 2 miles in the aggregate) to be recorded as ODND time. Saucon Technologies recommended allowing the driver to indicate yard movement by selecting an appropriate comment on the device. Once yard movement is selected, the driver would be allowed to move the CMV within the confines of the yard, (minimum amount of distance should be clearly defined), before the status would automatically change to On-Duty Driving.

While the driver is to indicate manually the beginning and ending of yard moves, XRS stated that there is no guidance on how the ELD should indicate a yard move is beyond appropriate limits, such as a warning if the ELD indicates Yard Move and the CMV exceeds the normal safe yard speed or distance. Geo-fencing of yards would be costly and time consuming and not an effective practice.

XRS asked FMCSA to clarify the process of reviewing unassigned driver moves of the CMV with an ELD device

installed. XRS believed the language in proposed § 395.32(c) seems to contradict the driver identification process as later described in § 395.32(c)(1)(ii). Commenter believed that the SNPRM made the carrier responsible for the final determination of ownership of unidentified driving. XRS suggested an edit process that would give the driver the opportunity to reject the unidentified hours in the edit review. XRS asked for direction concerning which ELD records under the unidentified driver profile need to be presented to the driver.

Coach USA stated that support personnel, rather than drivers, often make yard moves, for example, when they wash buses. The result is many short movements within the facility by personnel who are not drivers and never operate a bus outside of the facility. Under FMCA's proposed ELD specifications, Coach USA wrote that it appears that all of these yard moves by support personnel would be recorded as ''unidentified driving,'' and the carrier would be responsible for annotating each of these records to explain why they are not assigned to a driver. This would create a substantial administrative burden for large carriers. Coach USA suggested that FMCSA allow ELDs to be designed to recognize, using GPS, when they are being operated within the carrier's facility and could be set to automatically record any unassigned operation within the facility of a duration of less than 15 minutes as ''yard moves by support personnel.'' Such a system would effectively annotate all of the unassigned yard moves automatically. If a driver were to engage in yard moves, Coach USA wrote that driver could still log in and set the ELD to record the yard moves under his or her account. The Alliance for Driver Safety and Security stated that there is no guidance for the common situations whereby the truck leaves the property briefly, increases speed for a mile and returns to the yard.

Eclipse Software Systems asked FMCSA to allow automated yard moves. The point at which a vehicle comes to rest for more than 5 minutes becomes its anchor point. As long as the vehicle does not move, say, outside a half-mile radius of that anchor point, these moves could be logged automatically as yard moves. This prevents any significant vehicle use, while reducing the likely number of unauthenticated driving events. Eclipse also stated that sometimes drivers need to move their trucks short distances at a truck stop. It would be fair if they could log this as a yard-move, rather than having to switch to personal use, or trigger unauthenticated driving time. Truck stops are not technically ''yards'' so a clarification may be warranted in the rulemaking.

TRALA stated that, at the very least, there is some confusion as to whether all miles, including personal and yard miles, must be recorded. Zonar stated that an ELD must provide the means for a driver to indicate the beginning and end of a period when the driver uses the CMV for personal use or yard moves. Zonar asked how the driver will end the yard move if the CMV is moved in the yard and then continues out of the yard to a road move.

While the SNPRM does not subscribe to a specific threshold of miles or time, the TCA stated that it is important that personal conveyance be distinguished from true driving time. TCA wrote that FMCSA should more clearly define the principals and parameters of personal conveyance so that it can avoid any misinterpretation. ATA supported FMCSA's proposed treatment and recording of personal conveyance and movements within closed facilities (*i.e.,* yards). NAFA Fleet Management Association concurred that authorized use of a CMV for personal conveyance would not be recorded as driving, but rather off-duty time. Eclipse Software Systems agreed that the driver needs to indicate when he or she begins personal use. However, just as the proposed rules allow the driver to be placed in ODND after 5 minutes with no vehicle movement, Eclipse would like to enable the same automatic functionality for the end of Personal Use time. A number of individual commenters asked FMCSA to clarify when it is appropriate to use a CMV for personal conveyance. One asked that the guidance be rewritten. Another commenter suggested that personal conveyance could be used to disguise moves in the local delivery area of a terminal. Several individual commenters asked that allowances be made for maintenance driving, for example, when a CMV was being tested.

3. FMCSA Response

FMCSA acknowledges and agrees with the commenters who stated that ELDs, by virtue of recording all movements, will create a visible consistent record of all actions taken in the CMV.

The Agency is aware that there are concerns about personal conveyance and yard moves, as some commenters would like clear-cut limits on the mileage or time thresholds for CMV usage acceptable under personal conveyance and yard moves. However, the Agency does not think it is appropriate to include these definitions in the ELD rulemaking, as both clearly fall under the HOS rules and are applicable to a wide variety of CMV operations, not just those using ELDs. Thus, the Agency declines to address these matters at this time.

Additionally, the Agency does not create any new provisions for either status, instead requiring only that they each be recorded. By making specific requirements on how these statuses must be recorded, but not specifying limits in mileage or time, FMCSA has purposely left these guidelines as open as they are today, to suit the diversity of operations across the country.

FMCSA wishes to clarify that all miles driven, regardless of the status the driver has selected, are recorded. However, when a personal conveyance status is selected, the CMV's location is recorded with a lower level of precision, *i.e.,* an approximate 10-mile radius. FMCSA believes that the recording of these miles is essential to HOS compliance, but balances this requirement with protections on the privacy of location data when drivers are not on-duty.

If a driver selects the yard moves status and then begins regular driving, the driver simply switches statuses. If there is no break, and the driver forgets to add the new status, the driver can annotate his or her record to explain this, and can switch the time between the two statuses, as both are driving statuses.

At the end of a personal conveyance status, FMCSA does not require that the ELD automatically switch to an off-duty status. Again, the driver can annotate his or her record to explain if the driver forgets to record an off-duty status at the end of the driving time.

FMCSA understands the potential for abuse of the personal conveyance status, and has purposely required that all movements of the CMV be recorded (with a less precise location requirement). The rules do not allow driving statuses, including off-duty driving, to be edited to say they are non-driving time. These protections will directly address the falsification of HOS records, making it significantly harder. FMCSA believes that recording all the time that a CMV is in motion will limit significantly the amount of falsified time.

Commenters asked about mechanics or maintenance personnel operating CMVs, or driving done by employees who are not listed CMV drivers. Today's rule allows any employee of the motor carrier that operates the vehicle to have a unique login. If a CMV is operated by someone without a CDL within a yard, the mileage could be attributed to the

individual. Generally, the short-haul exception for RODS would mean these individuals would not be expected to use an ELD and there is nothing in this rulemaking that would preclude the ELD system from having entry categories to capture occasional movements of an ELD-equipped vehicle by individuals who are not required to prepare RODS.

FMCSA agrees that the carrier should have the opportunity to review unassigned driver miles, as they are ultimately responsible for the records. There is no prohibition on the motor carrier reviewing these records. FMCSA does not believe that this will be a significant administrative burden, especially if all employees who have the potential to operate CMVs on company property or beyond are given unique identifiers.

Today's rule does not allow ''anchoring'' or any location-based operational exemption. Drivers have the option to select a yard moves status in this case, and their operational history would need to be consistent with that status, which may look different depending on different types of operations.

O. Statutory Definition of ELD

1. Comments to the 2014 SNPRM

Subsequent to the NPRM, Congress enacted MAP–21, requiring regulations mandating the use of ELDs by drivers of CMVs required to keep RODS. The statute defines an electronic logging device as a ''device that . . . is capable of recording a driver's [HOS] and duty status accurately and automatically . . . and . . . meets the requirements established by the Secretary through regulation.'' 49 U.S.C. 31137(f)(1).

Focusing on the statutory definition of an ELD, OOIDA commented that FMCSA failed to comply with the statutory directive enacted as part of MAP–21 in that an ELD is not ''capable of recording a driver's hours of service and duty status accurately and automatically.'' 49 U.S.C. 31137(f)(1)(A). OOIDA viewed the Agency's action as ''arbitrary, capricious and reason enough for any court to overturn the . . . rule.'' Furthermore, OOIDA emphasized that the majority of HOS violations result from the miscoding of non-driving duty status.

2. FMCSA Response

The Agency acknowledges that technical specifications in this rule do not include ELDs that automatically record a driver's duty status, other than on-duty driving time. Although technology currently exists that could track a driver's every movement, including whether a driver is sleeping, this type of technology is not regularly employed in electronic recorders used to record drivers' HOS. FMCSA does not believe that Congress, in directing the Agency to require use of ELDs, envisioned this level of monitoring and the inherent privacy invasion that would occur. Indeed, given the privacy concerns raised by OOIDA and other commenters, we find it difficult to reconcile OOIDA's argument that the ELD functionality required in today's rule is not sufficiently broad because it does not record all of a driver's duty statuses.

In order to support its claim that FMCSA willfully ignores the definition of an ELD set forth in MAP–21, OOIDA reads the statutory definition in isolation. However, a fundamental rule of statutory construction requires that a statutory provision be read in the context of the statutory scheme and that no subsection be read in isolation. 2A Norman J. Singer & J.D. Shambie Singer, Statutes and Statutory Construction § 46.5 (7th ed. 2007). As part of the MAP–21 enactment addressing ELDs, Congress addressed the role of supporting documents, requiring the Agency to ''consider how [the] regulations may . . . reduce or eliminate . . . supporting document[s] associated with paper-based [RODS] if . . . data contained in an [ELD] supplants such documentation . . . and . . . using such data without paper-based records does not diminish the Secretary's ability to audit and review compliance with [HOS] regulations[.]'' 49 U.S.C. 31137(d)(1). Supporting documents serve a critical role in monitoring a driver's ODND time. Had Congress envisioned that the ELD could automatically track every duty status, it would have simply eliminated the need for supporting documents.

FMCSA finds further support for its position in the applicable legislative history. In developing the ELD provisions incorporated into MAP–21, including the statutory definition, the Senate Committee on Commerce, Science, and Transportation considered EOBRs then in use and referenced the Agency's February 1, 2010, NPRM, as to the type of electronic recorders it envisioned. S. Rep. No. 112–238 at 4 (2012). In prescribing the ELD mandate, Congress was clearly aware that neither existing technology nor the Agency's 2010 NPRM contemplated devices that would ''automatically'' monitor a driver's non-driving hours.

In response to OOIDA's comment that HOS violations result primarily from the miscoding of non-driving duty time, FMCSA notes that the data captured by ELDs, such as time, location, and mileage, combined with required supporting documents, will result in a more accurate record of a driver's duty status than paper RODS currently provide.

P. Roadside Enforcement

1. Comments to the SNPRM

The SNPRM specified how the ELD would transmit data to authorized safety officials at roadside. The proposed primary method of data transmission was Wireless Web Services or Bluetooth 2.1 or Email (SMTP) or compliant printout. The proposed backup methods were USB 2.0, Scannable QR codes, or TransferJet. An ELD must be able to present a graph grid of driver's daily duty status changes either on a display unit or on a printout.

Commenters believed that authorized safety officials at road side do not have the training or equipment to inspect vehicles with ELDs. FedEx stated that there is concern in the industry about uneven acceptance and use of the data transfer mechanisms by law enforcement. Particularly, there is concern that some law enforcement officers will feel more comfortable reviewing paper records and will thus demand paper from drivers. If the driver's ELD cannot print, then the officer may write a violation for failure to produce the required HOS documents. To prevent this type of uneven enforcement, FedEx suggested that FMCSA make clear in § 395.24 that a driver can provide his or her records to law enforcement by printouts or by data transfer.

The UMA stated that it is essential that enforcement personnel are able to evaluate the accuracy of compliance in the field. UMA has heard that a number of field interventions do not include reviewing electronic logs. UMA suggested that expedited uniform standards and training are critical to achieving the desired benefits of compliance.

OOIDA conducted a survey regarding the frequency with which State roadside inspections passed trucks monitored with EOBRs/ELDs through the inspection process without checking the trucker's logs. OOIDA received over 2,687 responses. Of those, 69 percent (2,069) reported that many trucks carry a sticker stating that it has an EOBR/ELD installed on the truck. The survey found that many responders reported that a law enforcement official declined to inspect the driver's logs because the official saw that the truck had a sticker. Many responders also stated that they

saw a law enforcement official passing on inspecting another driver's logs because the truck was equipped with an EOBR/ELD. Further, numerous responders reported that officers did not know how to operate the EOBRs/ELDs. Responders to the survey reported the practice of passing on inspection of such trucks was evident throughout the country, with no particular area singled out.

A driver said he had heard similar reports. He asked if poorly maintained vehicles are also being overlooked.

2. FMCSA Response

FMCSA recognizes the potential challenges during the transition from the current use of AOBRDs and paper logs to ELDs. Starting on the mandatory compliance date of this rule, FMCSA expects standardized data—shared with authorized safety officials by both electronic and non-electronic methods—to make enforcement more efficient by increasing the ease of reading and interpreting data presented by ELDs. Today's rule makes clear that either the standard display or printout will be available to ensure that CMVs with ELDs can be inspected absent an electronic data transfer.

To support a smooth transition period for the upcoming technological changes, FMCSA has initiated early planning to implement today's rule that will facilitate comprehensive, consistent enforcement. Today's rule standardizes the data transfer and display options on ELDs. This standardization facilitates the ability of roadside officers to use the ELD technology. While there will still be some unique functionality between systems and vendors, the underlying information and data will be communicated to roadside officers in a consistent manner across all ELDs, which will enhance roadside officers' ability to enforce HOS rules during roadside inspections.

Authorized safety officials also will receive standardized training, which will be scenario-driven and activity-based and focused on reading and interpreting standardized data. The Agency believes that training focused on efficiently reading ELD data in a standardized format will improve the ability of authorized safety officials to conduct inspections and investigations.

Q. Out of Scope Comments

1. 2011 NPRM and 2014 SNPRM

Commenters to both the 2011 NPRM and the SNPRM brought up a number of issues that are outside the scope of this rulemaking. Issues are out of scope if they cannot be addressed or changed in this rulemaking, though they may be related in some way to ELDs. For example, a number of comments are now out of scope because they dealt with the technical specifications of the (now vacated) April 2010 rule.

Commenters asked FMCSA to address a number of issues, such as changes to or elimination of HOS rules—a matter outside the scope of this rulemaking. Commenters had suggestions about how drivers should be paid, including payment by the hour and overtime after 40 hours. Commenters asked that shippers and receivers be held accountable for HOS-related violations, detention times, or loading issues.

A commenter asked FMCSA to raise the minimum insurance liability limits that truck drivers are required to carry, and to implement requirements for improved underride guards. A commenter asked FMCSA to impose speed limiters; another opposed them. A commenter also asked FMCSA to concentrate on maintenance issues.

Commenters recommended that FMCSA focus on all motorists, not just on commercial vehicles. A motor carrier wrote that whenever there is a crash involving a commercial vehicle, it goes on the history of that driver and company even if they were not at fault. The commenter asked why we are not getting this needed change accomplished first and then looking at the fatality numbers.

Commenters wrote that this rulemaking fails to address the parking shortage, and the problems drivers face when they cannot find a safe place to park at the end of their shift, when they are delayed, or when they run out of hours and are forced off property by a customer. Numerous commenters emphasized that adequate training is essential for drivers, or criticized existing training. Some commenters suggested that FMCSA go after inadequate driving schools or chameleon carriers. A commenter suggested that drivers have a panic button in the sleeper berth area to allow them to call law enforcement for help.

2. FMCSA Response

FMCSA is aware of the ongoing concerns, as reflected in these comments, concerning drivers' HOS, including parking issues, detention time, and hourly versus mileage payments. However, many of the issues raised are either outside the Agency's authority or outside the scope of today's rule.

XIII. Section-By-Section Analysis

This rulemaking establishes technical specifications for ELDs and sets forth requirements pertaining to the use of ELDs, the maintenance of supporting documents and the potential for ELD-related harassment of drivers.

Any substantive changes from the SNPRM are noted. The SNPRM tied compliance to the effective date of the final rule. However, in order to reflect the requirements of MAP–21, this rule ties compliance to the publication date.

A. Part 385—Safety Fitness Procedures

In Section VII of appendix B of part 385, the list of acute and critical regulations is modified to reflect changes in part 395 (HOS). The Agency removes the reference to a violation of § 390.36(b)(1) that appeared in the SNPRM to make this rule consistent with the treatment of violations under the recent coercion rulemaking (80 FR 74695, November 30, 2015). This deletion does not affect the treatment under appendix B of part 385 of any underlying violation in a carrier's safety fitness determination.

B. Part 386—Rules of Practice for Motor Carrier, Intermodal Equipment Provider, Broker, Freight Forwarder, and Hazardous Materials Proceedings

1. Section 386.1 (Scope of the Rules in This Part)

FMCSA modifies this section to reflect the handling of substantial violations and harassment violations by the appropriate Division Administrator, rather than the Division Administrator for the State where the incident occurs as was proposed. Paragraph (c) of this section was changed from the language of the SNPRM to make today's rule consistent with the recently published coercion rule (80 FR 74695, November 30, 2015), including the revision to and changes in codification in § 386.12.

Section 386.12 (Complaints)

All of § 386.12, including the heading, is changed and recodified to reflect the recently published coercion rulemaking (80 FR 74695, November 30, 2015). What was proposed in § 386.12 is now included in paragraph (a) of that section, ''complaint of substantial violation.'' FMCSA changes this paragraph to provide that substantial violation complaints must be filed through the National Consumer Complaint Database and will be referred to the Division Administrator who the Agency believes will be best able to handle the complaint. (Because any person may file a complaint alleging a substantial violation, references to a driver's State of employment found in § 386.12(b) and (c) are not included in this paragraph.) The time for filing a

complaint is extended from 60 to 90 days and the procedures are modified to closely track the procedures governing complaints under the coercion rule (80 FR 74695, November 30, 2015).

In a new paragraph (b), ''complaint of harassment,'' FMCSA adds the material that was proposed in § 386.12a. Harassment complaints are to be filed through the National Consumer Complaint Database or with the Division Administrator for the State where the driver is employed. Paragraph (b) identifies the information that a driver needs to include in a written complaint alleging harassment by a motor carrier, as well as procedures that the appropriate Division Administrator follows in handling complaints. The language in this paragraph was changed from the SNPRM to reflect the language in paragraph (c) of this section, adopted as part of the coercion rulemaking (80 FR 74695, November 30, 2015).

Paragraph (c), complaint of coercion, of this section was originally published on November 30, 2015 as part of the coercion rulemaking (80 FR 74695). Only changes are stylistic.

3. Section 386.12a

Proposed § 386.12a is not included in today's rule. Instead, the procedures proposed in § 386.12a are moved to § 386.12(b).

4. Section 386.30

Today's rule adds § 386.30—a provision that appeared as § 395.7 in the SNPRM. The only changes are stylistic. This section adds procedural provisions that apply during any proceeding involving the enforcement of 49 CFR part 395. Specifically, it provides that a motor carrier is liable for an employee acting or failing to act in a manner that violates part 395 as long as the action is within the course of the motor carrier's operations. The burden of proof is on the motor carrier to show that the employee acted outside the scope of the motor carrier's operation. Finally, knowledge of any document in the motor carrier's possession, or available to the motor carrier, that could be used to ensure compliance with part 395 is imputed to the motor carrier.

5. Appendix B to Part 386 (Penalty Schedule: Violations and Monetary Penalties)

FMCSA adds new paragraph (a)(7) granting the Agency discretion to consider the gravity of the driver harassment violation in the imposition of penalties up to the maximum permitted by law. The addition of this paragraph reflects the Agency's intention to appropriately address findings of driver harassment. In assessing the amount of a civil penalty, however, the Agency is required by statute to take certain factors into account. See 5 U.S.C. 521(b)(2)(D). Thus, the Agency will apply this provision through its Uniform Fine Assessment software to assure civil penalties are assessed in individual cases in a fair manner while addressing the gravity of harassment violations.

C. Part 390—Federal Motor Carrier Safety Regulations; General

FMCSA adds a new § 390.36 to define harassment by a motor carrier toward a driver employed by the motor carrier and to prohibit motor carriers from engaging in the harassment of drivers. This section also identifies the process under which a driver who believes he or she was subjected to harassment by a motor carrier may file a written complaint.

D. Part 395—Hours of Service of Drivers

Today's rule divides part 395 into two subparts. Subpart A, General, includes §§ 395.1 through 395.19. Subpart B, ELDs, addresses the design and use of ELDs and consists of §§ 395.20 through 395.38. FMCSA provides detailed performance specifications applicable to ELDs in the appendix to subpart B.

Subpart A—General

1. Section 395.1 (Scope of Rules in This Part)

FMCSA amends § 395.1(e) to reflect that drivers who qualify to use the short-haul exceptions under 49 CFR 395.1(e)(1) or (2) are not required to keep supporting documents under § 395.11.

2. Section 395.2 (Definitions)

In this section, FMCSA adds three new definitions. ''ELD record'' is added to mean a record of duty status, recorded on an ELD, that reflects the data elements that must be captured by an ELD under the technical specifications in the Appendix to subpart B of part 395. ''Electronic Logging Device (ELD)'' is added to mean a device or technology that automatically records driving time and facilitates the accurate recording of HOS and that meets the requirements of subpart B of part 395. FMCSA also adds a definition of ''supporting document'' similar to the definition in the HMTAA. Substantive provisions pertaining to supporting documents are in § 395.11.

3. Section 395.7 (Enforcement Proceedings)

Section 395.7, as proposed in the SNPRM, is included in today's rule as § 386.30. The only changes are stylistic.

4. Section 395.8 (Driver's Record of Duty Status)

This section addresses general requirements for HOS RODS. Subject to limited exceptions, it requires motor carriers to install and use ELDs that comply with the technical specifications no later than 2 years following the date of publication of today's rule.

Subject to limited exceptions, under paragraph (a)(1), motor carriers must require drivers that keep RODS to use ELDs. The rule allows a motor carrier that installs, and requires its drivers to use, AOBRDs before the compliance date of this rule to continue to use AOBRDs until December 16, 2019 thereby providing a 2-year grandfather period for devices installed prior to the compliance date.

Paragraph (a)(1)(iii) reflects a change from the SNPRM. The SNPRM would have allowed the use of paper RODS only by drivers requiring RODS not more than 8 days in a 30-day period. Today's rule allows drivers in a driveway-towaway operation—when the vehicle being driven is part of the shipment being delivered—as well as drivers of vehicles that were manufactured before model year 2000 to also use paper RODS.

Paragraph (a)(1)(iv) provides that, until the compliance date of this rule, motor carriers must require their drivers to keep RODS manually or by using either an ELD or an AOBRD.

Paragraph (a)(2)(ii) is also changed from the SNPRM. The SNPRM would have required drivers to use the recording method required by their motor carrier and to submit their RODS to their carrier within 8 days. Today's rule requires drivers to submit their RODS within 13 days.

Proposed paragraph (a)(3) is eliminated because operating a CMV while the ELD is malfunctioning is addressed in § 395.34(d).

Paragraph (e) prohibits a motor carrier or driver from making a false report in connection with duty status and from tampering with, or allowing another person to tamper with, an AOBRD or ELD to prevent it from recording or retaining accurate data.

Paragraph (i) (Filing driver's record of duty status) is eliminated because it duplicates the requirements of § 395.8(a)(2)(ii). Paragraph (k)(1) continues to require a motor carrier to retain RODS and supporting documents for a 6-month period.

5. Section 395.11 (New Section—Supporting Documents)

The detailed requirements concerning supporting documents are set forth in § 395.11. Paragraph (a) provides that the new supporting document provisions take effect 2 years after the publication date of the rule. Until this date, the June 10, 2010 policy on the retention of supporting documents and the use of electronic mobile communication/tracking technology remains in place (75 FR 32984).

Paragraph (b) addresses the drivers' obligation to submit supporting documents to their employers. While the SNPRM would have required the driver to submit supporting documents within 8 days, today's rule specifies 13 days. (The term ''employer'' is defined in § 390.5.) The phrase ''required to be retained under [§ 395.11]'' is eliminated in today's rule to avoid the erroneous implication that the driver, rather than the motor carrier, determines what records are retained.

Paragraph (c) describes five categories of supporting documents generated or received in the normal course of business. These categories include: (1) Bills of lading, itineraries, schedules, or equivalent documents indicating the origin and destination of a trip; (2) dispatch records, trip records, or equivalent documents; (3) expense receipts related to ODND time; (4) electronic mobile communication records reflecting communications transmitted through an FMS (*e.g.,* text messages, email messages, instant messages, or pre-assigned coded messages); and (5) payroll records, settlement sheets, or equivalent documents reflecting driver payments.

Paragraph (c)(2) identifies the four data elements that a document must contain in order to qualify as a supporting document: Driver identification, date, vehicle location and time. The SNPRM provided that, for a driver who had fewer than 10 supporting documents containing those four data elements, documents containing the first three specified elements (*i.e.,* all elements *except* time) would be considered supporting documents for purposes of paragraph (d) of this section (discussed below). In this rule, FMCSA reduces the number of supporting documents to eight.

Paragraph (d) generally requires a motor carrier to retain a maximum of eight documents for an individual driver's 24-hour duty day. While the SNPRM proposed a 10-document cap, today's rule reduces that number to eight. Paragraph (d)(2) describes how FMCSA will treat electronic mobile communication records in applying the eight-document cap. Under paragraph (d)(3), if a motor carrier has more than eight documents for a driver's 24-hour period, the motor carrier needs to retain the documents containing the earliest and latest time indications. Under paragraph (d)(4), drivers who continue to use paper RODS must retain all toll receipts, irrespective of the eight-document requirement. The Agency interprets the reference to ''toll receipts'' to include electronic records.

Paragraph (e) requires a motor carrier to retain supporting documents in a way that allows the documents to be matched to a driver's RODS.

Paragraph (f) prohibits motor carriers and drivers from obscuring, defacing, destroying, mutilating, or altering information in a supporting document.

Paragraph (g) requires that, during a roadside inspection, drivers must make available to an authorized official, any supporting document in the driver's possession. In today's rule, a paragraph heading is added for clarification.

Paragraph (h) describes the process for submitting requests for self-compliance systems that FMCSA may authorize on a case-by-case basis, as required by HMTAA.

6. Section 395.15 (Automatic On-Board Recording Devices)

Paragraph (a) describes how FMCSA will sunset the authority to use AOBRDs 2 years after the rule's publication date. However, those motor carriers that have installed AOBRDs prior to the sunset date are allowed to continue using AOBRDs for an additional 2 years (*i.e.,* up to 4 years after the publication date of the final rule).

Subpart B—Electronic Logging Devices (ELDS)

7. Section 395.20 (New Section—ELD Applicability and Scope)

Section 395.20 paragraph (a) states that this subpart applies to ELDs used to record a driver's HOS.

Paragraph (b) describes the applicability of technical specifications required for ELDs under subpart B, effective 2 years after the rule's publication date.

In order to avoid confusion, proposed paragraph (c) was removed to eliminate language referencing support systems.

8. Section 395.22 (New Section—Motor Carrier Responsibilities—In General)

Section 395.22 outlines motor carriers' responsibilities related to the use of ELDs. Paragraph (a) requires motor carriers to use only ELDs registered and certified with FMCSA and listed on the Agency's Web site: *www.fmcsa.dot.gov/devices*.

Paragraph (b) outlines the responsibilities of a motor carrier and its support personnel authorized to access ELD records.

Paragraph (c) lists the required driver identification data.

Paragraph (d) details the identification data for motor carrier support personnel.

Paragraph (e) states that a motor carrier must require its drivers and support personnel to use the proper log-in process for an ELD.

Paragraph (f) requires a motor carrier to calibrate and maintain ELDs.

Paragraph (g) contains the requirements for mounting portable ELDs.

Paragraph (h) lists the information a motor carrier is required to provide to its drivers who are using ELDs in their CMVs.

Paragraph (i) requires a motor carrier to retain a driver's ELD records so as to protect the driver's privacy in a manner consistent with sound business practices. This paragraph also requires that the motor carrier retain a separate back-up copy of ELD records for six months.

Paragraph (j) requires a motor carrier to provide 6 months of ELD records electronically to authorized safety officials when requested during an enforcement activity or, if the motor carrier has multiple offices or terminals, within the time permitted under § 390.29.

9. Section 395.24 (New Section—Driver Responsibilities—In General)

Paragraph (a) requires a driver to provide data as prompted by the ELD and as required by the motor carrier.

Paragraph (b) lists the duty statuses that a driver may choose from, corresponding to the duty status categories currently listed on paper RODS.

Paragraph (c) lists other data that a driver may sometimes need to enter manually into the ELD, such as annotations, file comments, verification, CMV number, trailer numbers, and shipping numbers, as applicable.

Paragraph (d) requires a driver to produce and transfer the driver's HOS data to an authorized safety official on request.

10. Section 395.26 (New Section—ELD Data Automatically Recorded)

Paragraph (a) notes that the data elements listed in this section are in accordance with the requirements of the appendix to subpart B of part 395.

Paragraph (b) lists the data elements recorded when an ELD logs an event.

Paragraph (c) describes requirements for data recording during a change of duty status event.

Paragraph (d) describes what an ELD records during an intermediate recording when the CMV is in motion and there has been no change of duty status entered into the ELD and no other intermediate status recorded in an hour.

Paragraph (e) describes what an ELD records when a driver selects a special driving category, *i.e.,* personal use or yard moves.

Paragraph (f) describes what an ELD records when a driver certifies a daily log.

Paragraph (g) describes what an ELD records when there is a log in/log off event.

Paragraph (h) describes what an ELD records when the CMV's engine powers on or off.

Paragraph (i) describes an ELD's recording of location information during authorized personal use of a CMV.

Paragraph (j) describes what an ELD records when it detects a malfunction or data diagnostic event.

11. Section 395.28 (New Section—Special Driving Categories; Other Driving Statuses)

Paragraph (a) allows motor carriers to configure an ELD to authorize a driver to indicate that he or she is operating a CMV under one of the special driving categories identified in this paragraph. This paragraph also lists a driver's responsibilities related to ELD use when operating under one of these special driving categories.

Paragraph (b) allows a motor carrier to configure an ELD to show that a driver is exempt from ELD use.

Paragraph (c) requires a driver excepted under § 390.3(f) or § 395.1 to annotate the ELD record to explain why the driver is excepted.

12. Section 395.30 (New Section—ELD Record Submissions, Edits, Annotations and Data Retention)

Paragraph (a) states that both drivers and motor carriers are responsible for ensuring that drivers' ELD records are accurate.

Paragraph (b) requires a driver to review and certify that the driver's ELD records are accurate and explains how to use the certification function of the ELD.

Paragraph (c) allows a driver, within the edit limits of an ELD, to edit, add missing information, and annotate ELD recorded events. This paragraph states that a driver must use an ELD and follow the ELD's prompts when making such changes or annotations. It also explains how mistakes involving team drivers may be corrected.

Paragraph (d) permits a motor carrier to request edits to a driver's RODS in order to ensure accuracy. It explains the process by which a driver implements motor carrier-proposed edits, requiring that a driver must confirm or reject any edits made to his or her record by anyone other than the driver.

Paragraph (e) prohibits a motor carrier from coercing a driver to falsely certify the driver's data entries or RODS. FMCSA defined the term ''coerce'' in a separate rulemaking (80 FR 74695, November 30, 2015).

Paragraph (f) prohibits a motor carrier from altering or deleting original ELD records concerning the driver's HOS, the source data used to provide that information or related driver HOS information contained in any ELD. Language referencing support systems proposed in the SNPRM was removed to avoid confusion.

13. Section 395.32 (New Section—Non-Authenticated Driver Logs)

This section describes how the ''non-authenticated'' operation of a CMV is accounted for in the ELD record.

Paragraph (a) describes how the ELD tracks non-authenticated use of a CMV as soon as the vehicle is in motion.

Paragraph (b) requires a driver to review any unassigned driving time listed under the account upon login to the ELD. If the unassigned records are not attributable to the driver, the driver must indicate that fact in the ELD record. If driving time logged under this unassigned account belongs to the driver, the driver must add that driving time to his or her own record.

Paragraph (c) lists the requirements for a motor carrier to explain or assign ''non-authenticated driver log'' time. The motor carrier must retain unidentified driving records for at least six months as a part of its HOS ELD records and make them available to authorized safety officials.

14. Section 395.34 (New Section—ELD Malfunction and Data Diagnostic Events)

Paragraph (a) sets forth a driver's recordkeeping requirements in the event of an ELD malfunction. It specifies that the driver would need to provide written notice to the motor carrier of an ELD malfunction within 24 hours.

Paragraph (b) explains what a driver is required to do if the driver's HOS records are inspected during a malfunction.

Paragraph (c) requires a driver to follow the ELD provider's and the motor carrier's recommendations to resolve data inconsistencies that generate an ELD data diagnostic event.

Paragraph (d) requires that a motor carrier take corrective action within 8 days of discovering the malfunction of an ELD, or notification of the malfunction by the driver, whichever comes first. If a motor carrier needs additional time to repair, replace, or service one or more ELDs, paragraph (d) also provides a process for requesting an extension of time from FMCSA.

15. Section 395.36 (New Section—Driver Access to Records)

Paragraph (a) makes clear that drivers must have access to their own ELD records. A motor carrier may not require that its drivers access their own ELD records by requesting them through the motor carrier if those records are otherwise available on or retrievable through the ELD operated by the driver.

Paragraph (b) requires a motor carrier to provide a driver with access to the driver's own ELD records, upon request, if they are unavailable through the ELD.

16. Section 395.38 (New Section—Incorporation by Reference)

Section 395.38 describes materials that are incorporated by reference (IBR) in subpart B of part 395 and addresses where the materials are available. Whenever FMCSA, or any Federal agency, wants to refer in its rules to materials or standards published elsewhere, it needs approval from the Director of the Office of the Federal Register. FMCSA describes the process it needs to follow in this section.

Industry best practices rely upon these standards. FMCSA updated the standards proposed in the SNPRM in order to make the most recent, easily available versions of the applicable standards part of the final rule. None of these is a major version change; most are revisions to the standards that should not be complicated or onerous for those ELD providers already working in this field. Additionally, these standards are technical in nature, and focus on the function of the device. The only parties who will need to purchase these standards are parties who wish to become ELD providers.

The following provides a brief description of each standard. All the standards are available for low cost or free, as noted below. In order to provide better access, FMCSA includes Web addresses where the user can find more information about the standard or download it. Complete contact information is included as part of § 395.38. These standards are also available for review at FMCSA headquarters.

Paragraph (b)(1), American National Standard Institute 's (ANSI) ''4–1986

(R2012) Information Systems—Coded Character Sets—7-Bit American National Standard Code for Information Interchange (7-Bit ASCII),'' describes a character set code to convert digits to alphabet, number, and symbol characters used in computing. This code set is used to create ELD files. IBR in section 4.8.2.1, Appendix to subpart B of part 395. As of October 20, 2015, this standard was available for $60, and information about it can be found at *http://webstore.ansi.org/RecordDetail.aspx?sku=INCITS+4-1986%5bR2012%5d.*

Paragraph (b)(2), ANSI's ''ANSI INCITS 446–2008 (R2013), American National Standard for Information Technology—Identifying Attributes for Named Physical and Cultural Geographic Features (Except Roads and Highways) of the United States, Its Territories, Outlying Areas, and Freely Associated Areas and the Waters of the Same to the Limit of the Twelve-Mile Statutory Zone (10/28/2008),'' covers geographic names and locations stored in the U.S. Geological Survey (USGS) Geographic Names Information System (GNIS). This information is required to populate the location database of compliant ELDs. IBR in section 4.4.2, Appendix to subpart B of part 395. As of October 20, 2015, this standard was available for $60, and information about it can be found at *http://webstore.ansi.org/RecordDetail.aspx?sku=INCITS+446-2008%5bR2013%5d.*

Paragraph (c)(1) describes ''Specification of the Bluetooth System: Wireless Connections Made Easy,'' the Bluetooth Special Interest Group's standard for short range wireless network communication. Under today's rule, the standard could be used for a transfer of ELD data. IBR in sections 4.9.1, 4.9.2, 4.10.1.4, 4.10.2, Appendix to subpart B of 395. As of October 20, 2015, this standard was available at no cost, and information about it can be found at *https://www.bluetooth.org/Technical/Specifications/adopted.htm.*

Paragraph (d)(1), Institute of Electric and Electronic Engineers' (IEEE) ''Standard for Authentication in Host Attachments of Transient Storage Devices,'' describes a trust and authentication protocol for USB 2.0 flash drives and other storage devices that can be used for a possible transfer of ELD data according to the specifications of this rule. IBR in section 4.10.1.3, Appendix to subpart B of part 395. As of October 20, 2015, this standard was available for $185, and information about it can be found at *http://standards.ieee.org/findstds/standard/1667-2009.html.*

Paragraph (e)(1) contains the standard for ''Use of the Advanced Encryption Standard (AES) Encryption Algorithm in Cryptographic Message Syntax (CMS)'' This standard relates to wireless data transfer through email. IBR in section 4.10.1.2, Appendix to subpart B of 395. As of October 20, 2015, this standard was available at no cost, and can be found at *https://tools.ietf.org/html/rfc3565.*

Paragraph (e)(2) references ''Use of the RSASSA–PSS Signature Algorithm in Cryptographic Message Syntax (CMS).'' This standard relates to wireless data transfer through email. IBR in section 4.10.1.2, Appendix to subpart B of 395 of title 49 of the CFR. As of October 20, 2015, this standard was available at no cost, and can be found at *https://tools.ietf.org/html/rfc4056.*

Paragraph (e)(3), IETF's ''Simple Mail Transfer Protocol,'' is an industry standard for a computer networking protocol to send and receive electronic mail (email) containing ELD data. IBR in section 4.10.1.2, Appendix to subpart B of part 395. As of October 20, 2015, this standard was available at no cost, and can be found at *https://www.rfc-editor.org/rfc/rfc5321.txt.*

Paragraph (e)(4) contains ''Secure/Multipurpose Internet Mail Extensions (S/MIME).'' This standard relates to wireless data transfer through email. IBR in section 4.10.1.2, Appendix to subpart B of 395. As of October 20, 2015, this standard was available at no cost, and can be found at *https://tools.ietf.org/html/rfc5751.*

Paragraph (e)(5), IETF's ''Internet Message Format,'' describes an industry standard for the formatting of email, (*i.e.* address, header information, text, and attachments), including those emails containing ELD data. IBR in section 4.10.1.2, Appendix to subpart B of part 395. As of October 20, 2015, this standard was available at no cost, and can be found at *https://tools.ietf.org/html/rfc5322.*

Paragraphs (e)(6), IETF's RFC 7230, Hypertext Transfer Protocol—HTTP/1.1 Message Syntax and Routing, and (e)(7), IETF RFC 7231, Hypertext Transfer Protocol—HTTP/1.1 Semantics and Content, both describe a computer networking protocol that is the foundation for the World Wide Web. These standards will be used if ELD files are transferred using the Web. They are both incorporated by reference in section 4.10.1.1, Appendix to subpart B of part 395. As of October 20, 2015, standard RFC 7230 was available at no cost, and can be found at *https://tools.ietf.org/html/rfc7230.* As of October 20, 2015, standard RFC 7231 was available at no cost, and can be found at *https://tools.ietf.org/html/rfc7231.*

Paragraph (e)(8) incorporates IETF's ''The Transport Layer Security (TLS) Protocol Version 1.2,'', a security mechanism standard for information that is being transmitted over a network. This standard is best known for use with Web sites that start with ''https://'' rather than just ''http://''. This standard will be used to secure data when ELD files are transferred using the Web. IBR in section 4.10.1.1, Appendix to subpart B of part 395. As of October 20, 2015, this standard was available at no cost and it can be found at *https://tools.ietf.org/html/rfc5246.*

Paragraph (f)(1),''Federal Information Processing Standards (FIPS) Publication 197, November 26, 2001, Announcing the ADVANCED ENCRYPTION STANDARD (AES),'' describes the National Institute of Standards and Technology's (NIST) Federal government standard for encrypting data in order to protect its confidentiality and integrity. This standard may be used to encrypt emailed data derived from the ELD. IBR in sections 4.10.1.2 and 4.10.1.3, Appendix to subpart B of 395. As of October 20, 2015, this standard is available at no cost at *http://csrc.nist.gov/publications/fips/fips197/fips-197.pdf.*

Paragraph (f)(2) describes ''Special Publication (SP) 800–32, February 26, 2001, Introduction to Public Key Technology and the Federal PKI Infrastructure,'' NIST's guidance document for securely exchanging sensitive information, including some ELD data. IBR in section 4.10.1.2, Appendix to subpart B of 395. As of October 20, 2015, this standard is available at no cost at *http://csrc.nist.gov/publications/nistpubs/800-32/sp800-32.pdf.*

Paragraph (g)(1) contains Universal Serial Bus Implementers Forum's (USBIF) ''Universal Serial Bus Specification'' or USB 2.0, which is an industry standard for communication between two computing devices. The USB 2.0 allows a driver to transfer the record of duty status data to a safety official using a small device commonly called a ''flash drive.'' IBR in sections 4.9.1, 4.9.2, 4.10.1.3, and 4.10.2, Appendix to subpart B of part 395. As of October 20, 2015, this standard was available at no cost and it can be found at *http://www.usb.org/developers/docs/usb20_docs/.*

Paragraph (h)(1) describes ''Simple Object Access Protocol (SOAP) Version 1.2 Part 1: Messaging Framework (Second Edition), W3C Recommendation 27 April 2007,''

W3C's specification for a computer networking protocol for Web services. This protocol will be used if ELD files are transferred using the Web. IBR in section 4.10.1.1, Appendix to subpart B of 395. As of October 20, 2015, this standard was available at no cost, and can be found at *http://www.w3.org/TR/soap12-part1/*.

17. Appendix A to Subpart B of Part 395 (New Section)

Appendix A to subpart B of part 395 contains the technical requirements for ELDs. It consists of seven sections.

Section 1 outlines the purpose and content of the rest of the appendix. Section 1 was recodified by adding letters and numbers to each paragraph for ease of reference.

Section 2 lists the abbreviations used throughout this appendix. FMCSA removes the abbreviation ''QR'' for ''quick response'' because that technology is not included in today's rule.

Section 3 provides definitions for terms and notations used in this appendix. In the today's rule, FMCSA codified section 3 throughout, adding letters and numbers to each paragraph as necessary for ease of reference. FMCSA clarifies section 3.1.4 by adding a specific reference to the display or printout required in section 4.I

Section 4 lists all the functional requirements for an ELD. This section provides a detailed description of the technical specifications for an ELD, including security requirements, internal engine synchronization, ELD inputs, manual entries of data, and drivers' use of multiple vehicles. FMCSA provides descriptions specific enough to allow the ELD provider to determine whether an ELD would meet the requirements for certification.

FMCSA made numerous changes to proposed section 4, which reflect the simplified data transfer requirements in today's rule. FMCSA recodified section 4 throughout, due to changes in the text and for ease of reference. FMCSA has eliminated language referencing support systems that was proposed in § 395.20(c) to avoid confusion. Throughout section 4, FMCSA made conforming changes.

In section 4.2, FMCSA adds a specific reference to the information that the ELD must receive automatically, and clarifies that the use of non-ECM data is only acceptable when there is no other option. In section 4.5, FMCSA changed the references to section 7 to reflect the codification changes in section 7. In section 4.6.1.4, FMCSA changed the phrase ''within the past 5 miles of the CMV's movement'' to read ''within 5 miles of the CMV's movement'' to clarify how the regulation applies FMCSA revised proposed section 4.6.3.1 to remove the last two paragraphs because they are redundant. In section 4.7.2(b), FMCSA changed the reference to ''hours-of-service records'' to ''ELD records,'' to clarify which records are meant.

FMCSA revises proposed section 4.8.1 to describe the compliant report that the ELD must be able to generate either as a printout or on a display. In addition, FMCSA corrected the data elements in sections 4.8.2.1.5 and 4.8.2.1.9.

Proposed section 4.9.1 is revised to remove the references to the proposed roadside data transfer capabilities and add new methods for meeting roadside electronic data reporting requirements. The new methods require transferring electronic data using either Option 1, wireless Web services and email, or Option 2, USB 2.0 and Bluetooth. In section 4.9.2(c), FMCSA replaces the term ''ELD data file or files'' with the term ''ELD records.'' In paragraph (c), FMCSA also adds Bluetooth to the transfer mechanisms already specified.

Proposed section 4.10 is reorganized. FMCSA revises proposed section 4.10.1 to remove the word ''Wireless'' in the heading, and add a reference to a ''data transfer mechanism'' to reflect the new methods of transferring electronic data. Proposed section 4.10.1.2, which described wireless data transfer via Bluetooth, is moved to new section 4.10.1.4. Proposed section 4.10.1.3, which described wireless data transfer through email, is moved to 4.10.1.2. In addition, in new section 4.10.1.2(b), FMCSA adds three new encryption standards: The Secure/Multipurpose Internet Mail Extensions as described in RFC 5751, the RSA algorithm as described in RFC 4056, and RFC 3565. Proposed section 4.10.2.1, which covers USB 2.0, becomes new section 4.10.1.3, but the rest of proposed section 4.10.2 is removed as part of the reorganization. Proposed sections 4.10.2.2, which pertained to scannable QR codes, and 4.10.2.3, which described TransferJet, are both removed because those technologies are not included in today's rule. The rest of 4.10.2, as appropriate, is moved to section 4.8.1. Proposed section 4.10.3 becomes section 4.10.2. FMCSA adds a new paragraph to section 4.10.2(d) to describe Bluetooth.

Section 5 describes the ELD certification and registration process. FMCSA numbered the paragraphs in Section 5 for ease of reference and made related conforming changes. In section 5.2.2, the phrase ''institute an'' is corrected to read ''identify its.'' FMCSA adds section 5.4 to the appendix, which describes the process that FMCSA uses to remove an ELD model or version from the list of ELDs on the FMCSA Web site. The administrative review process available to an ELD provider is described in section 5.4.5. The administrative review process consists of a two steps. First, an ELD provider will have an opportunity to either cure any deficiency that the Agency identified or explain to the Agency why, in the ELD provider's view, the Agency's determination is wrong. If the ELD provider fails to respond, fails to convince the Agency that its decision is erroneous, or fails to cure any defect to the Agency's satisfaction, within prescribed time periods, the Agency will then remove the ELD model or version from its list of certified products. Second, in the event of removal, the ELD provider will have an additional opportunity to challenge the Agency's decision through an administrative post-deprivation review.

Section 6 lists references cited throughout this appendix. Section 6 is changed to conform with the new codification in the rest of the appendix. Section 6 matches § 395.38 exactly. It is repeated in the appendix to provide a convenient guide for these standards within the Appendix to Subpart B itself. To conform to § 395.38, FMCSA adds several new references to section 6, and updates others to the current versions. FMCSA also removes several references that are no longer relevant to the rulemaking.

Section 7 provides a data elements dictionary for each data element referenced in the appendix. In today's rule, FMCSA adds a new data element to section 7, ''ELD provider,'' to clarify what is meant by that term. Section 7 is recodified to conform with the codification used in the rest of the appendix.

XIV. Regulatory Analyses

A. Executive Order 12866 (Regulatory Planning and Review), Executive Order 13563 (Improving Regulation and Regulatory Review), and DOT Regulatory Policies and Procedures

FMCSA has determined that this rulemaking is an economically significant regulatory action under Executive Order (E.O.) 12866, Regulatory Planning and Review, as supplemented by E.O. 13563 (76 FR 3821, January 21, 2011). It also is significant under Department of Transportation regulatory policies and procedures because the economic costs and benefits of the rule exceed the $100 million annual threshold and because of the substantial congressional and public

interest concerning the crash risks associated with driver fatigue.

FMCSA mandates the installation and use of ELDs by drivers currently required to prepare HOS RODS.[41] However, the costs and benefits of such a broad mandate are not identical across both options evaluated in the RIA. The Agency has chosen to evaluate options that reflect public comments regarding past ELD and HOS rulemakings and the Agency's safety priorities. The RIA associated with this rule examined two options:

- Option 1: ELDs are mandated for all CMV operations subject to 49 CFR part 395.
- Option 2 (Adopted): ELDs are mandated for all CMV operations where the driver is required to complete RODS under 49 CFR 395.8.

FMCSA adopted Option 2. The costs and benefits resulting from the adoption of Option 2 are presented in the table below:

TABLE 5—SUMMARY OF ANNUALIZED COSTS AND BENEFITS

[7% discount rate]

	Annualized total value (2013 $ millions)	Notes
Cost element:		
New ELD Costs	$1,032.2	For all long-haul (LH) and short-haul (SH) drivers that use RODS, to pay for new devices and FMS upgrades.
Automatic On-Board Recording Device (AOBRD) Replacement Costs.	2.0	Carriers that purchased AOBRDs for their CMVs and can be predicted to still have them in 2019 and would need to replace or update them with ELDs.
Enforcement Equipment Costs	1.3	The final rule does not require inspectors to purchase QR code scanners. Instead, inspectors would have Bluetooth capability and USB 2.0.
Enforcement Training Costs	1.6	Costs include travel to training sites, as well as training time, for all inspectors in the first year and for new inspectors each year thereafter.
CMV Driver Training Costs	8.0	Costs of training new drivers in 2017, and new drivers each year thereafter.
HOS Compliance Costs	790.4	Extra drivers and CMVs needed to ensure that no driver exceeds HOS limits.
Total Costs	1,836	
Benefit element:		
Paperwork Savings (Total of three parts below).	$2,437.6	
(1) Driver Time	1,877.2	Reflects time saved as drivers no longer have to fill out and submit paper RODS.
(2) Clerical Time	433.9	Reflects time saved as office staff no longer have to process paper RODS.
(3) Paper Costs	126.6	Purchases of paper logbooks are no longer necessary.
Safety (Crash Reductions)	572.2	Although the predicted number of crash reductions is lower for SH than LH drivers, both should exhibit less fatigued driving if HOS compliance increases. Complete HOS compliance is not assumed.
Total Benefits	3,010	
Net Benefits	1,174	

Modifications to the rule analysis resulted in moderate changes to the cost and benefit estimates for the rule from what was included in the SNPRM. For example, the purchase price of the ELD was reduced to reflect the most up-to-date prices consistent with the technical requirements of the rule, the population estimates were adjusted to update the universe of drivers subject to the requirements of the rule, and equipment requirements for inspectors were adjusted to no longer include QR scanners. The population changes had the effect of increasing costs, while adjustments to the ELD purchase price and equipment needs resulted in a decrease in costs. Overall, the total costs are somewhat higher than what was projected in the SNPRM. In addition, the total benefits of the rule increased due to updated wage estimates and adjustments to the projection of the cost of a crash. This resulted in an increase in the overall net benefits for the rule from what was proposed in the SNPRM. These revisions are discussed in more detail throughout the RIA.

B. Regulatory Flexibility Act

1. Introduction

The Regulatory Flexibility Act of 1980, Public Law 96–354, 94 Stat. 1164 (5 U.S.C. 601–612), as amended by the Small Business Regulatory Enforcement Fairness Act of 1996 (Pub. L. 104–121, 110 Stat. 857, March 29, 1996) and the Small Business Jobs Act of 2010 (Pub. L. 111–240, September 27, 2010), requires Federal agencies to consider the effects of the regulatory action on small business and other small entities and to minimize any significant economic impact. The term ''small entities'' comprises small businesses and not-for-profit organizations that are independently owned and operated and are not dominant in their fields, and governmental jurisdictions with populations of less than 50,000. Accordingly, DOT policy requires an

[41] This rule does not require short-haul drivers who would need to keep RODS for not more than 8 days in any 30-day period to use an ELD. Although FMCSA cannot quantify the costs to carriers, the Agency believes that extending the ELD mandate to these drivers would not be cost beneficial.

analysis of the impact of all regulations on small entities, and mandates that agencies strive to lessen any adverse effects on these businesses.

A Final Regulatory Flexibility Analysis must contain the following:

- A statement of the need for, and objectives of, the rule.
- A statement of the significant issues raised by the public comments in response to the Initial Regulatory Flexibility Act (IRFA), a statement of the assessment of the agency of such issues, and a statement of any changes made in the proposed rule as a result of such comments.
- The response of the agency to any comments filed by the Chief Counsel for Advocacy of the Small Business Administration in response to the proposed rule, and a detailed statement of any change made to the proposed rule in the final rule as a result of the comments.
- A description of and an estimate of the number of small entities to which the rule will apply or an explanation of why no such estimate is available.
- A description of the projected reporting, recordkeeping, and other compliance requirements of the rule, including an estimate of the classes of small entities which will be subject to the requirement and the type of professional skills necessary for preparation of the report or record.
- A description of the steps the agency has taken to minimize the significant economic impact on small entities consistent with the stated objectives of applicable statutes, including a statement of the factual, policy, and legal reasons for selecting the alternative adopted in the final rule and why each of the other significant alternatives to the rule considered by the agency which affect the impact on small entities was rejected.
- For a covered agency, as defined in section 609(d)(2), a description of the steps the agency has taken to minimize any additional cost of credit for small entities.

2. Statement of the Need for and Objectives of This Rule

The Agency is issuing this rule to mandate the use of ELDs by the majority of CMV operations. The objective is to reduce the number of crashes caused by driver fatigue that could have been avoided had the driver complied with the HOS rules.

The Agency is required by statute (MAP–21) to adopt regulations requiring that CMVs operated in interstate commerce by drivers required to keep RODS, be equipped with ELDs. FMCSA amends part 395 of the FMCSRs to require the installation and use of ELDs for CMV operations for which RODS are required. CMV drivers are currently required to record their HOS (driving time, on- and off-duty time) in paper RODS, although some carriers have voluntarily adopted an earlier standard for HOS recording using devices known as AOBRDs. The HOS regulations are intended to ensure that driving time ''do[es] not impair their ability to operate the vehicles safely'' (49 U.S.C. 31136(a)(2)). Driver compliance with the HOS rules helps ensure that ''the physical condition of commercial motor vehicle drivers is adequate to enable them to operate the vehicles safely'' (49 U.S.C. 31136(a)(3)). FMCSA believes that properly designed, used, and maintained ELDs would enable motor carriers to track their drivers' on-duty driving hours accurately, thus preventing regulatory violations or excessive driver fatigue.

Improved HOS compliance would prevent commercial vehicle operators from driving for long periods without opportunities to obtain adequate rest. Sufficient rest is necessary to ensure that a driver is alert behind the wheel and able to respond appropriately to changes in the driving environment.

Substantial paperwork and recordkeeping burdens are also associated with HOS rules, including time spent by drivers filling out and submitting paper RODS and time spent by motor carrier staff reviewing, filing, and retaining these RODS. ELDs would eliminate all of the driver's clerical tasks associated with the RODS and significantly reduce the time drivers spend recording their HOS. These paperwork reductions offset most of the costs of the devices.

3. Public Comment on the IRFA, FMCSA Assessment and Response

Although public comment on the SNPRM for this rule was extensive, there were no comments specific to the Initial Regulatory Flexibility Analysis.

4. FMCSA Response to Comments by the Chief Counsel for Advocacy of the Small Business Administration on the IRFA

The FMCSA did not receive comments from the Chief Counsel for Advocacy of the Small Business Administration on the IRFA included with the SNPRM for this rule.

5. Description and Numerical Estimate of Small Entities Affected by the Rulemaking

The motor carriers regulated by FMCSA operate in many different industries, and no single Small Business Administration (SBA) size threshold is applicable to all motor carriers. Most for-hire property carriers operate under North American Industrial Classification System [42] (NAICS) code 484, truck transportation (see: *http://www.bls.gov/iag/tgs/iag484.htm*), although some for-hire carriers categorize themselves as ''express delivery services'' (NAICS 492110) or ''local delivery'' (NAICS 492210) or operate primarily in other modes of freight transportation. As shown in Table 6 below, the SBA size standard for truck transportation and local delivery services is currently $27.5 million in revenue per year and 1,500 employees for express delivery services. For other firms in other modes that may also be registered as for-hire motor carriers, the size standard is 500 or 1,500 employees. As Table 6 also shows, for-hire passenger operations that FMCSA regulates have a size standard of $15 million in annual revenue.

TABLE 6—SBA SIZE STANDARDS FOR SELECTED INDUSTRIES

[2014 $]

NAICS codes	NAICS industry description	Annual revenue (millions)	Employees
481112 and 481212	Freight Air Transportation		1,500
482111	Line-Haul Railroads		1,500
483111 through 483113	Freight Water Transportation		500
484110 through 484230	Freight Trucking	$27.5	

[42] More information about NAICS is available at: *http://www.census.gov/eos/www/naics/.*

TABLE 6—SBA SIZE STANDARDS FOR SELECTED INDUSTRIES—Continued

[2014 $]

NAICS codes	NAICS industry description	Annual revenue (millions)	Employees
492110	Couriers and Express Delivery		1,500
492210	Local Messengers and Local Delivery	27.5	
485210 through 485510	Bus Transportation	15.0	
445110	Supermarkets and Grocery Stores	32.5	
452111	Department Stores (except Discount Department Stores)	32.5	
452112	Discount Department Stores	29.5	
452910	Warehouse Clubs and Superstores	29.5	
452990	Other General Merchandise Stores	32.5	
453210	Office Supplies and Stationery Stores	32.5	
236115 through 236220	Building Construction	36.5	
237110	Water and Sewer Line and Related Structures Construction	36.5	
237120	Oil and Gas Pipeline and Related Structures Construction	36.5	
237130	Power and Communication Line and Related Structures Construction	36.5	
237210	Land Subdivision	27.5	
237310	Highway, Street, and Bridge Construction	36.5	
237990	Other Heavy and Civil Engineering Construction	36.5	
238110 through 238990	Specialty Trade Contractors	15.0	
111110 through 111998	Crop Production	0.75	
112111	Beef Cattle Ranching and Farming	0.75	
112112	Cattle Feedlots	7.5	
112120	Dairy Cattle and Milk Production	0.75	
112210	Hog and Pig Farming	0.75	
112310	Chicken Egg Production	15.0	
112320 through 112990	All Other Animal Production	0.75	
113310	Logging		500
211111 through 213111	Oil and Gas Extraction and Mining		500

This rulemaking will also affect private motor carriers. These carriers use CMVs they own or lease to ship their own goods (such as a motor carrier that is operated by a retail department store chain to distribute goods from its warehouses to its store locations) or in other regulated transportation activities related to their primary business activities (for example, dump trucks used by construction companies). The latter category also includes the provision of passenger transportation services not available to the general public. FMCSA does not have NAICS codes for motor carriers and therefore cannot determine the appropriate size standard to use for each case. As shown, the size standards vary widely, from $0.75 million for many types of farms to $36.5 million for building construction firms.

For for-hire motor carriers, FMCSA examined data from the 2007 Economic Census [43] to determine the percentage of firms that have revenue at or below SBA's thresholds. Although boundaries for the revenue categories used in the Economic Census do not exactly coincide with the SBA thresholds, FMCSA was able to make reasonable estimates using these data. According to the Economic Census, about 99 percent of trucking firms had annual revenue less than $27.5 million; the Agency concluded that the percentage would be approximately the same using the SBA threshold of $25.5 million as the boundary. For passenger carriers, the $15 million SBA threshold falls between two Economic Census revenue categories, $10 million and $25 million. The percentages of passenger carriers with revenue less than these amounts were 96.7 percent and 98.9 percent. Because the SBA threshold is closer to the lower of these two boundaries, FMCSA has assumed that the percentage of passenger carriers that are small will be closer to 96.7 percent, and is using a figure of 97 percent.

For private carriers, the Agency constructed its estimates under the assumption that carriers in the 99th percentile in terms of number of CMVs of for-hire property carriers will be large. In the case of for-hire property carriers, we assumed that carriers in the 97th percentile will also be large. That is, any company of sufficient size to maintain a fleet large enough to be considered a large truck or bus company will be large within its own industry. This could overestimate the number of small, private carriers. However, the Agency is confident that no small private carrier would be excluded. The Agency found that for property carriers, the threshold was 194 CMVs, and that for passenger carriers, it was 89 CMVs. FMCSA identified 195,818 small private property carriers (99.4 percent of this group), and 6,000 small private passenger carriers (100.0 percent of this group).

The table below shows the complete estimates of the number of small carriers. All told, FMCSA estimates that 99.1 percent of regulated motor carriers are small businesses according to SBA size standards.

[43] U.S. Census Bureau, ''2007 Economic Census.'' *http://www.census.gov/econ/census/.*

TABLE 7—ESTIMATES OF NUMBERS OF SMALL ENTITIES

	For-hire general freight	For-hire specialized freight	For-hire passenger	Private property	Private passenger	Total
Carriers	176,000	152,000	8,000	197,000	6,000	539,000
Percentage of Small Carriers	98.9%	98.9%	97.0%	99.4%	100.0%	99.1%
Number of Small Carriers	174,064	150,328	7,760	195,818	6,000	533,970

6. Description of Reporting, Recordkeeping and Other Compliance Requirements of the Rule

FMCSA believes that implementation of the rule will not require additional reporting, recordkeeping, or other paperwork-related compliance requirements beyond what are already required in the existing regulations. In fact, the rule is estimated to result in paperwork savings, particularly from the elimination of paper RODS. Furthermore, the carriers will experience compensatory time-saving or administrative efficiencies as a result of using ELD records in place of paper RODS. The level of savings will vary with the size of the carrier implementing the systems (larger carriers generally experience greater savings).

Under current regulations, most CMV drivers are required to fill out RODS for every 24-hour period. The remaining population of CMV drivers is required to fill out time cards at their workplace (reporting location). Motor carriers must retain the RODS (or timecards, if used) for 6 months. FMCSA estimates annual recordkeeping cost savings from this rule of about $805 per driver. This comprises $558 for a reduction in time drivers spend completing paper RODS and $65 submitting those RODS to their employers; $144 for motor carrier clerical staff to handle and file the RODS; and $38 for elimination of expenditures on blank paper RODS for drivers. One of the options discussed in the rule (Option 1) would extend the ELD mandate to carrier operations that are exempt from the RODS requirements. Paperwork savings would not accrue to drivers engaged in these operations.

Under the Paperwork Reduction Act of 1995 (PRA) (44 U.S.C. 3501 *et seq.*), Federal agencies must obtain approval from OMB for each collection of information they conduct, sponsor, or require through regulations. This rule makes regulatory changes to several parts of the FMCSRs, but only those applicable to part 395, ''Hours of Service of Drivers,'' will alter or impose ICR. The ICR of this rule will affect OMB Control Number 2126–0001, which is currently approved through May 31, 2018, at 127,600,000 burden hours.

7. Steps To Minimize Adverse Economic Impacts on Small Entities

Of the population of motor carriers that FMCSA regulates, 99 percent are considered small entities under SBA's definition. Because small businesses constitute a large part of the demographic the Agency regulates, providing exemptions to small business to permit noncompliance with safety regulations is not feasible and not consistent with good public policy. The safe operation of CMVs on the Nation's highways depends on compliance with all of FMCSA's safety regulations. Accordingly, the Agency will not allow any motor carriers to be exempt from coverage of the rule based solely on a status as a small entity. Furthermore, exempting small businesses from coverage would be inconsistent with the explicit statutory mandate contained in MAP–21.

The Agency recognizes that small businesses may need additional information and guidance in order to comply with the regulation. To improve their understanding of the rule, FMCSA intends to conduct outreach aimed specifically at small businesses, including webinars and other presentations upon request as needed and at no charge to the participants. These sessions will be held after the rule has published and before the rule's compliance date. To the extent practicable, these presentations will be interactive. They will describe in plain language the compliance and reporting requirements so they are can be readily understood by the small entities that will be affected.

ELDs can lead to significant paperwork savings that can offset the costs of the devices. The Agency, however, recognizes that these devices entail an up-front investment that can be burdensome for small carriers. At least one provider, however, provides free hardware and recoups the cost of the device over time in the form of higher monthly operating fees. The Agency is also aware of lease-to-own programs that allow carriers to spread the purchase costs over several years. Nevertheless, the typical carrier will likely be required to spend about $584 per CMV to purchase and install ELDs. In addition to purchase costs, carriers will also likely spend about $20 per month per CMV for monthly service fees.

8. Description of Steps Taken by a Covered Agency To Minimize Costs of Credit for Small Entities

FMCSA is not a covered agency as defined in section 609(d)(2) of the Regulatory Flexibility Act, and has taken no steps to minimize the additional cost of credit for small entities.

C. Unfunded Mandates Reform Act of 1995

Title II of the Unfunded Mandates Reform Act of 1995 requires Agencies to evaluate whether an Agency action would result in the expenditure by State, local, and tribal governments, in the aggregate, or by the private sector, of $155 million or more (which is $100 million in 1995, adjusted for inflation) in any 1 year, and, if so, to take steps to minimize these unfunded mandates. As Table 8 shows, this rulemaking would result in private sector expenditures in excess of the $155 million threshold for each of the options. Gross costs, however, are expected to be more than offset in savings from paperwork burden reductions.

The Agency is required by statute to adopt regulations requiring that CMVs, operated in interstate commerce by drivers required to keep RODS, be equipped with ELDs (49 U.S.C. 31137). To the extent this rule implements the direction of Congress in mandating the use of ELDs, a written statement under the Unfunded Mandates Reform Act is not required.[44] However, the Agency

[44] *Unfunded Mandates Reform Act of 1995.* Title II, Section 201. *http://www.gpo.gov/fdsys/pkg/PLAW-104publ4/pdf/PLAW-104publ4.pdf.*

provides its projection of the annualized costs to the private sector in Table 8 below. Additionally the Agency's adopted option provides the lowest cost and highest net benefits of the options considered.

TABLE 8—ANNUALIZED NET EXPENDITURES BY PRIVATE SECTOR

[2013 $ millions]

Cost or Savings Category	Option 1	Option 2
New ELD Costs	$1,336	$1,032
AOBRD Replacement Costs	2	2
HOS Compliance Costs	929	790
Driver Training Costs	10	8
Total Costs	2,278	1,833
Total Savings (Paperwork)	2,438	2,438
Net Expenditure by Private Sector	−160	−605

D. Executive Order 12988 (Civil Justice Reform)

This rulemaking meets applicable standards in sections 3(a) and 3(b)(2) of E.O. 12988, Civil Justice Reform, to minimize litigation, eliminate ambiguity, and reduce burden.

E. Executive Order 13045 (Protection of Children)

FMCSA analyzed this action under E.O. 13045, Protection of Children from Environmental Health Risks and Safety Risks. FMCSA determined that this rulemaking would not pose an environmental risk to health or safety that might affect children disproportionately.

F. Executive Order 12630 (Taking of Private Property)

This rulemaking would not effect a taking of private property or otherwise have takings implications under E.O. 12630, Governmental Actions and Interference with Constitutionally Protected Property Rights.

G. Executive Order 13132 (Federalism)

A rulemaking has implications for Federalism under E.O. 13132, Federalism, if it has a substantial direct effect on State or local governments and would either preempt State law or impose a substantial direct cost of compliance on State or local governments. FMCSA analyzed this action in accordance with E.O. 13132. The rule would not have a substantial direct effect on States or local governments, nor would it limit the policymaking discretion of States. Nothing in this rulemaking would preempt any State law or regulation.

H. Executive Order 12372 (Intergovernmental Review)

The regulations implementing E.O. 12372 regarding intergovernmental consultation on Federal programs and activities do not apply to this action.

I. Executive Order 13175 (Consultation and Coordination With Indian Tribal Governments)

FMCSA analyzed this rulemaking in accordance with the principles and criteria in E.O. 13175, Consultation and Coordination with Indian Tribal Governments. This rulemaking is required by law and does not significantly or uniquely affect the communities of the Indian tribal governments or impose substantial direct compliance costs on tribal governments. Thus, the funding and consultation requirements of E.O. 13175 do not apply and no tribal summary impact statement is required.

J. Paperwork Reduction Act

The Paperwork Reduction Act of 1995 (44 U.S.C. 3501 *et seq.*) requires Federal agencies to obtain OMB approval of each information collection (IC) they conduct, sponsor, or require through agency regulations. Information-collection requests (ICRs) submitted to OMB by agencies must estimate the burden hours imposed by their information-collection (IC) requirements. Part 395 of the Federal Motor Carrier Safety Regulations, ''Hours of Service of Drivers,'' requires drivers and motor carriers to collect, transmit and maintain information about driver daily activities. The part 395 ICR is assigned OMB Control Number 2126–0001. On May 21, 2015, OMB approved the Agency's estimate of 127.6 million burden hours as the annual IC burden of part 395 as it existed at that time, prior to this final rule. This rulemaking substantially amends the IC requirements of part 395.

For the SNPRM of this rulemaking (79 FR 17656, March 28, 2014), the Agency excluded the IC burden of drivers operating purely in intrastate commerce, but following discussions with OMB, decided the burden of these drivers should be included in future part 395 estimates. The intrastate burden was included in the estimate approved by OMB on May 21, 2015, and is included in the Agency's burden estimate for this final rule.

FMCSA estimates that 3.37 million interstate and intrastate CMV drivers are subject to the IC requirements of part 395 as of 2013. OMB regulations require that Agencies estimate IC burdens over a period of 3 years. This rule has a compliance date 2 years from the date of its publication. Thus, during the first 2 years of this PRA estimate, drivers and motor carriers will not be required to employ ELDs. The Agency has incorporated estimates of the number of drivers who will be voluntarily employing electronic HOS recording devices during each of the first 2 years. For year three, the Agency's estimate is based upon all drivers using electronic logging devices. FMCSA estimates that the part 395 amendments of this final rule will reduce the IC burden an average of 21,373,653 hours annually for the 3-year period.

K. National Environmental Policy Act and Clean Air Act

FMCSA analyzed this rulemaking for the purpose of the National Environmental Policy Act of 1969 (42 U.S.C. 4321, *et seq.*) and determined under DOT Environmental Procedures Order 5610.1, issued March 1, 2004 (69 FR 9680), that this action would have a minor impact on the environment. The Environmental Assessment is available for inspection or copying at the Regulations.gov Web site listed under Section II.A of this preamble. There were two notable changes to data input values used in section 3.2.1 of the Environmental Assessment for today's rule as compared to the equivalent values used in the Environmental

Assessment for the SNPRM. First, in the calculation of emissions from additional idling, the number of affected long-haul tractors with sleeper berths was increased from 665,000, which was based on year 2002 data, to a revised estimate of 976,889 to reflect growth in the number of truck tractors from 2002 to 2012 as reported by the Federal Highway Administration. For additional details, see section 3.2.1 of the Environmental Assessment. Second, in the calculation of the reduction of emissions from crash prevention, the emission rates per crash for the six Environmental Protection Agency criteria pollutants and for carbon dioxide were updated from values that were previously based on FMCSA research from 2004 regarding the environmental impacts of truck crashes, to revised emission rate values that are based on more recent FMCSA research from 2013 regarding the environmental impacts of truck crashes. For additional details, see section 3.2.1 of the Environmental Assessment.

FMCSA also analyzed this action under section 176(c) of the Clean Air Act (CAA), as amended (42 U.S.C. 7506(c)), and the U.S. Environmental Protection Agency's implementing regulations, 40 CFR part 93. Pursuant to 40 CFR 93.153, a conformity determination is required ''for each criteria pollutant or precursor where the total of direct and indirect emissions of the criteria pollutant or precursor in a nonattainment or maintenance area caused by a Federal action would equal or exceed any of the rates in paragraphs (b)(1) or (2) of this section.'' FMCSA recognizes that the action taken in this rulemaking could slightly affect emissions of criteria pollutants from CMVs. FMCSA discusses the air emissions analysis in section 3.2.1 of the Environmental Assessment for this rule.

As discussed in section 3.1.2 of the Environmental Assessment, the CAA requires additional analysis to determine if this action impacts air quality. In determining whether this action conforms to CAA requirements in areas designated as nonattainment under section 107 of the CAA and maintenance areas established under section 175A of the CAA, FMCSA is required (among other criteria) to determine if the total direct and indirect emissions are at or above de minimis levels. In the case of the alternatives in this rulemaking, as discussed in section 3.2.1 of the Environmental Assessment (except for the No-Action Alternative), FMCSA considers the change in emissions to be an indirect result of the rulemaking action. FMCSA is requiring drivers and motor carriers to use ELDs that would lead to greater compliance with the HOS regulations, which does not directly result in additional emissions releases.

Although emissions from idling are foreseeable and an indirect result of the rulemaking, in order for the idling emissions to qualify as 'indirect emissions' pursuant to 40 CFR 93.152, they must meet all four criteria in the definition: (1) The emissions are caused or initiated by the Federal action and originate in the same nonattainment or maintenance area but occur at a different time or place as the action; (2) they are reasonably foreseeable; (3) FMCSA can practically control them; and (4) FMCSA has continuing program responsibility for them. FMCSA does not believe the increase of emissions of some criteria pollutants or their precursors from the proposed rulemaking meet two of the criteria: That FMCSA can practically control the emissions, and that FMCSA has continuing program responsibility. FMCSA's statutory authority limits its ability to require drivers to choose alternatives to idling while taking a rest period. If FMCSA had authority to control CMV emissions, the Agency could prohibit idling or require drivers to choose an alternative such as electrified truck stops or use of auxiliary power units, both of which reduce idling emissions. Moreover, based on FMCSA's analysis, it is reasonably foreseeable that this rulemaking would not significantly increase total CMV mileage, nor would it change the routing of CMVs, how CMVs operate, or the CMV fleet mix of motor carriers. Therefore, because the idling emissions do not meet the definition of direct or indirect emissions in 40 CFR 93.152, FMCSA has determined it is not required to perform a CAA general conformity analysis, pursuant to 40 CFR 93.153.[45]

L. Executive Order 12898 (Environmental Justice)

FMCSA evaluated the environmental effects of this rulemaking in accordance with E.O. 12898 and determined that there are neither environmental justice issues associated with its provisions nor any collective environmental impact resulting from its promulgation. Environmental justice issues would be raised if there were ''disproportionate'' and ''high and adverse impact'' on minority or low-income populations. None of the alternatives analyzed in the Agency's deliberations would result in high and adverse environmental justice impacts.

M. Executive Order 13211 (Energy Effects)

FMCSA analyzed this action under E.O. 13211, Actions Concerning Regulations That Significantly Affect Energy Supply, Distribution, or Use. FMCSA determined that it is not a ''significant energy action'' under that E.O. because, although this rulemaking is economically significant, it is not likely to have an adverse effect on the supply, distribution, or use of energy.

N. National Technology Transfer and Advancement Act

The National Technology Transfer and Advancement Act (15 U.S.C. 272 note) requires agencies to ''use technical standards that are developed or adopted by voluntary consensus standards bodies'' to carry out policy objectives determined by the agencies, unless the standards are ''inconsistent with applicable law or otherwise impractical.'' This requirement pertains to ''performance-based or design-specific technical specifications and related management systems practices.'' MAP–21 also requires that the Agency adopt a ''standard security level for an electronic logging device and related components to be tamper resistant by using a methodology endorsed by a nationally recognized standards organization'' (49 U.S.C. 31137(b)(2)(C)).

FMCSA is not aware of any technical standards addressing ELDs. However, in today's rule, the Agency employs several publicly-available consensus standards consistent with these statutory mandates, including standards adopted by the World Wide Web Consortium to facilitate secure Web based communications, American National Standards Institute (ANSI) codes for identification of geographic locations and for standard information display, Institute of Electrical and Electronic Engineers (IEEE) Standards Association standards addressing secure transfer of data with a portable storage device, Bluetooth Special Interest Group (SIG) standards addressing short-range wireless information transfer, and the USB Specification (Revision 2.0). In addition, although not developed by a private sector consensus standard body, FMCSA also employs the National Institute of Standards and Technology (NIST) standards concerning data encryption. A complete list of standards that FMCSA proposes for adoption is found in 49 CFR 395.38.

[45] Additionally, the EPA General Conformity regulations provide an exemption for rulemaking activities. See 40 CFR 93.153(c)(2)(iii).

O. E-Government Act of 2002

The E-Government Act of 2002, Public Law 107–347, section 208, 116 Stat. 2899, 2921 (Dec. 17, 2002), requires Federal agencies to conduct a privacy impact assessment for new or substantially changed technology that collects, maintains, or disseminates information in an identifiable form. FMCSA completed an assessment in connection with today's rule addressing the handling of PII. The assessment is a documented assurance that privacy issues have been identified and adequately addressed, ensures compliance with laws and regulations related to privacy, and demonstrates the DOT's commitment to protect the privacy of any personal information we collect, store, retrieve, use, and share. Additionally, the publication of the assessment demonstrates DOT's commitment to provide appropriate transparency in the ELD rulemaking process. A copy of the privacy impact assessment is available in the docket for this rulemaking.

List of Subjects

49 CFR Part 385

Administrative practice and procedure, Highway safety, Mexico, Motor carriers, Motor vehicle safety, Reporting and recordkeeping requirements

49 CFR Part 386

Administrative practice and procedure, Brokers, Freight forwarders, Hazardous materials transportation, Highway safety, Motor carriers, Motor vehicle safety, Penalties

49 CFR Part 390

Highway safety, Intermodal transportation, Motor carriers, Motor vehicle safety, Reporting and recordkeeping requirements

49 CFR Part 395

Highway safety, Incorporation by reference, Motor carriers, Reporting and recordkeeping requirements

In consideration of the foregoing, FMCSA amends 49 CFR chapter III, parts 385, 386, 390, and 395 as follows:

PART 385—SAFETY FITNESS PROCEDURES

■ 1. The authority citation for part 385 is revised to read as follows:

Authority: 49 U.S.C. 113, 504, 521(b), 5105(e), 5109, 5123, 13901–13905, 31133, 31135, 31136, 31137, 31144, 31148, and 31502; Sec. 113(a), Pub. L. 103–311; Sec. 408, Pub. L. 104–88, 109 Stat. 803, 958; and 49 CFR 1.87.

■ 2. Amend Appendix B to part 385, section VII, by removing the entries for §§ 395.8(a), 395.8(e), and 395.8(i), and the two entries for § 395.8(k)(1); and adding entries for § 395.8(a)(1), § 395.8(a)(2)(ii), § 395.8(e)(1), § 395.8(e)(2), § 395.8(k)(1), § 395.11(b), § 395.11(c), § 395.11(e), § 395.11(f), and § 395.30(f) in numerical order to read as follows:

Appendix B to Part 385—Explanation of Safety Rating Process

* * * * *

VII. List of Acute and Critical Regulations

* * * * *

§ 395.8(a)(1) Failing to require a driver to prepare a record of duty status using appropriate method (critical).

§ 395.8(a)(2)(ii) Failure to require a driver to submit record of duty status in a timely manner (critical).

§ 395.8(e)(1) Making, or permitting a driver to make, a false report regarding duty status (critical).

§ 395.8(e)(2) Disabling, deactivating, disengaging, jamming, or otherwise blocking or degrading a signal transmission or reception; tampering with an automatic on-board recording device or ELD; or permitting or requiring another person to engage in such activity (acute).

§ 395.8(k)(1) Failing to preserve a driver's record of duty status or supporting documents for 6 months (critical).

§ 395.11(b) Failing to require a driver to submit supporting documents in a timely manner (critical).

§ 395.11(c) Failing to retain types of supporting documents as required by § 395.11(c) (critical).

§ 395.11(e) Failing to retain supporting documents in a manner that permits the effective matching of the documents to the driver's record of duty status (critical).

§ 395.11(f) Altering, defacing, destroying, mutilating, or obscuring a supporting document (critical).

§ 395.30(f) Failing to retain ELD information (acute).

* * * * *

PART 386—RULES OF PRACTICE FOR MOTOR CARRIER, INTERMODAL EQUIPMENT PROVIDER, BROKER, FREIGHT FORWARDER, AND HAZARDOUS MATERIALS PROCEEDINGS

■ 3. The authority citation for part 386 is revised to read as follows:

Authority: 49 U.S.C. 113, 504, 521(b), 5105(e), 5109, 5123, 13901–13905, 31133, 31135, 31136, 31137, 31144, 31148, and 31502; Sec. 113(a), Pub. L. 103–311; Sec. 408, Pub. L. 104–88, 109 Stat. 803, 958; and 49 CFR 1.87.

■ 4. Amend § 386.1 by revising paragraph (a) and adding paragraph (c) to read as follows:

§ 386.1 Scope of rules in this part.

(a) Except as provided in paragraph (c) of this section, the rules in this part govern proceedings before the Assistant Administrator, who also acts as the Chief Safety Officer of the Federal Motor Carrier Safety Administration, under applicable provisions of the Federal Motor Carrier Safety Regulations (49 CFR parts 350–399), including the commercial regulations (49 CFR parts 360–379), and the Hazardous Materials Regulations (49 CFR parts 171–180).

* * * * *

(c)(1) The rules in § 386.12(a) govern the filing of a complaint of a substantial violation and the handling of the complaint by the appropriate Division Administrator.

(2) The rules in § 386.12(b) govern the filing by a driver and the handling by the appropriate Division Administrator of a complaint of harassment in violation of § 390.36 of this subchapter.

(3) The rules in § 386.12(c) govern the filing by a driver and the handling by the appropriate Division Administrator of a complaint of coercion in violation of § 390.6 of this subchapter.

■ 5. Revise § 386.12 to read as follows:

§ 386.12 Complaints.

(a) *Complaint of substantial violation.* (1) Any person alleging that a substantial violation of any regulation issued under the Motor Carrier Safety Act of 1984 is occurring or has occurred must file a written complaint with FMCSA stating the substance of the alleged substantial violation no later than 90 days after the event. The written complaint, including the information below, must be filed with the National Consumer Complaint Database at *http://nccdb.fmcsa.dot.gov or any FMCSA Division Administrator.* The Agency will refer the complaint to the Division Administrator who the Agency believes is best able to handle the complaint. Information on filing a written complaint may be obtained by calling 1–800–DOT–SAFT (1–800–368–7238). A substantial violation is one which could reasonably lead to, or has resulted in, serious personal injury or death. Each complaint must be signed by the complainant and must contain:

(i) The name, address, and telephone number of the person who files it;

(ii) The name and address of the alleged violator and, with respect to each alleged violator, the specific provisions of the regulations that the complainant believes were violated; and

(iii) A concise but complete statement of the facts relied upon to substantiate each allegation, including the date of each alleged violation.

(2) Upon the filing of a complaint of a substantial violation under paragraph (a)(1) of this section, the Division Administrator shall determine whether the complaint is non-frivolous and meets the requirements of paragraph (a)(1) of this section. If the Division Administrator determines the complaint is non-frivolous and meets the requirements of paragraph (a)(1), the Division Administrator shall investigate the complaint. The complainant shall be timely notified of findings resulting from the investigation. The Division Administrator shall not be required to conduct separate investigations of duplicative complaints. If the Division Administrator determines the complaint is frivolous or does not meet the requirements of paragraph (a)(1), the Division Administrator shall dismiss the complaint and notify the complainant in writing of the reasons for the dismissal.

(3) Notwithstanding the provisions of 5 U.S.C. 552, the Division Administrator shall not disclose the identity of complainants unless it is determined that such disclosure is necessary to prosecute a violation. If disclosure becomes necessary, the Division Administrator shall take every practical means within the Division Administrator's authority to ensure that the complainant is not subject to coercion, harassment, intimidation, disciplinary action, discrimination, or financial loss as a result of such disclosure.

(b) *Complaint of harassment.* (1) A driver alleging a violation of § 390.36(b)(1) of this subchapter (harassment) must file a written complaint with FMCSA stating the substance of the alleged harassment by a motor carrier no later than 90 days after the event. The written complaint, including the information described below, must be filed with the National Consumer Complaint Database at *http://nccdb.fmcsa.dot.gov* or the FMCSA Division Administrator for the State where the driver is employed. The Agency may refer a complaint to another Division Administrator who the Agency believes is best able to handle the complaint. Information on filing a written complaint may be obtained by calling 1–800–DOT–SAFT (1–800–368–7238). Each complaint must be signed by the driver and must contain:

(i) The driver's name, address, and telephone number;

(ii) The name and address of the motor carrier allegedly harassing the driver; and

(iii) A concise but complete statement of the facts relied upon to substantiate each allegation of harassment, including:

(A) How the ELD or other technology used in combination with and not separable from the ELD was used to contribute to harassment;

(B) The date of the alleged action; and

(C) How the motor carrier's action violated either § 392.3 or part 395.

Each complaint may include any supporting evidence that will assist the Division Administrator in determining the merits of the complaint.

(2) Upon the filing of a complaint of a violation under paragraph (b)(1) of this section, the appropriate Division Administrator shall determine whether the complaint is non-frivolous and meets the requirements of paragraph (b)(1) of this section.

(i) If the Division Administrator determines the complaint is non-frivolous and meets the requirements of paragraph (b)(1) of this section, the Division Administrator shall investigate the complaint. The complaining driver shall be timely notified of findings resulting from the investigation. The Division Administrator shall not be required to conduct separate investigations of duplicative complaints.

(ii) If the Division Administrator determines the complaint is frivolous or does not meet the requirements of paragraph (b)(1) of this section, the Division Administrator shall dismiss the complaint and notify the complainant in writing of the reasons for the dismissal.

(3) Because prosecution of harassment in violation of § 390.36(b)(1) of this subchapter will require disclosure of the driver's identity, the Agency shall take every practical means within its authority to ensure that the driver is not subject to coercion, harassment, intimidation, disciplinary action, discrimination, or financial loss as a result of the disclosure. This will include notification that 49 U.S.C. 31105 includes broad employee protections and that retaliation for filing a harassment complaint may subject the motor carrier to enforcement action by the Occupational Safety and Health Administration.

(c) *Complaint of coercion.* (1) A driver alleging a violation of § 390.6(a)(1) or (2) of this subchapter must file a written complaint with FMCSA stating the substance of the alleged coercion no later than 90 days after the event. The written complaint, including the information described below, must be filed with the National Consumer Complaint Database at *http://nccdb.fmcsa.dot.gov* or the FMCSA Division Administrator for the State where the driver is employed. The Agency may refer a complaint to another Division Administrator who the Agency believes is best able to handle the complaint. Information on filing a written complaint may be obtained by calling 1–800–DOT–SAFT (1–800–368–7238). Each complaint must be signed by the driver and must contain:

(i) The driver's name, address, and telephone number;

(ii) The name and address of the person allegedly coercing the driver;

(iii) The provisions of the regulations that the driver alleges he or she was coerced to violate; and

(iv) A concise but complete statement of the facts relied upon to substantiate each allegation of coercion, including the date of each alleged violation.

(2) *Action on complaint of coercion.* Upon the filing of a complaint of coercion under paragraph (c)(1) of this section, the appropriate Division Administrator shall determine whether the complaint is non-frivolous and meets the requirements of paragraph (c)(1).

(i) If the Division Administrator determines that the complaint is non-frivolous and meets the requirements of paragraph (c)(1) of this section, the Division Administrator shall investigate the complaint. The complaining driver shall be timely notified of findings resulting from such investigation. The Division Administrator shall not be required to conduct separate investigations of duplicative complaints.

(ii) If the Division Administrator determines the complaint is frivolous or does not meet the requirements of paragraph (c)(1) of this section, the Division Administrator shall dismiss the complaint and notify the driver in writing of the reasons for the dismissal.

(3) *Protection of complainants.* Because prosecution of coercion in violation of § 390.6 of this subchapter will require disclosure of the driver's identity, the Agency shall take every practical means within its authority to ensure that the driver is not subject to coercion, harassment, intimidation, disciplinary action, discrimination, or financial loss as a result of the disclosure. This will include notification that 49 U.S.C. 31105 includes broad employee protections and that retaliation for filing a coercion complaint may subject the alleged coercer to enforcement action by the Occupational Safety and Health Administration.

■ 6. Add § 386.30 to subpart D to read as follows:

§ 386.30 Enforcement proceedings under part 395.

(a) *General.* A motor carrier is liable for any act or failure to act by an employee, as defined in § 390.5 of this subchapter, that violates any provision of part 395 of this subchapter if the act or failure to act is within the course of the motor carrier's operations. The fact that an employee may be liable for a violation in a proceeding under this subchapter, based on the employee's act or failure to act, does not affect the liability of the motor carrier.

(b) *Burden of proof.* Notwithstanding any other provision of this subchapter, the burden is on a motor carrier to prove that the employee was acting outside the scope of the motor carrier's operations when committing an act or failing to act in a manner that violates any provision of part 395 of this subchapter.

(c) *Imputed knowledge of documents.* A motor carrier shall be deemed to have knowledge of any document in its possession and any document that is available to the motor carrier and that the motor carrier could use in ensuring compliance with part 395 of this subchapter. ''Knowledge of any document'' means knowledge of the fact that a document exists and the contents of the document.

■ 7. Amend appendix B to part 386 by adding paragraph (a)(7) to read as follows:

Appendix B to Part 386—Penalty Schedule; Violations and Monetary Penalties

* * * * *

(a) * * *

(7) *Harassment.* In instances of a violation of § 390.36(b)(1) of this subchapter the Agency may consider the ''gravity of the violation,'' for purposes of 49 U.S.C. 521(b)(2)(D), sufficient to warrant imposition of penalties up to the maximum permitted by law.

* * * * *

PART 390—FEDERAL MOTOR CARRIER SAFETY REGULATIONS; GENERAL

■ 8. The authority citation for part 390 is revised to read as follows:

Authority: 49 U.S.C. 504, 508, 31132, 31133, 31134, 31136, 31137, 31144, 31151, 31502; sec. 114, Pub. L. 103–311, 108 Stat. 1673, 1677–1678; sec. 212, 217, Pub. L. 106–159, 113 Stat. 1748, 1766, 1767; sec. 229, Pub. L. 106–159 (as transferred by sec. 4115 and amended by secs. 4130–4132, Pub. L. 109–59, 119 Stat. 1144, 1726, 1743–1744); sec. 4136, Pub. L. 109–59, 119 Stat. 1144, 1745; sections 32101(d) and 34934, Pub. L. 112–141, 126 Stat. 405, 778, 830; sec. 2, Pub. L. 113–125, 128 Stat. 1388; and 49 CFR 1.87.

■ 9. Add § 390.36 to read as follows:

§ 390.36 Harassment of drivers prohibited.

(a) *Harass or harassment defined.* As used in this section, harass or harassment means an action by a motor carrier toward a driver employed by the motor carrier (including an independent contractor while in the course of operating a commercial motor vehicle on behalf of the motor carrier) involving the use of information available to the motor carrier through an ELD, as defined in § 395.2 of this chapter, or through other technology used in combination with and not separable from the ELD, that the motor carrier knew, or should have known, would result in the driver violating § 392.3 or part 395 of this subchapter.

(b) *Prohibition against harassment.* (1) No motor carrier may harass a driver.

(2) Nothing in paragraph (b)(1) of this section shall be construed to prevent a motor carrier from using technology allowed under this subchapter to monitor productivity of a driver provided that such monitoring does not result in harassment.

(c) *Complaint process.* A driver who believes he or she was the subject of harassment by a motor carrier may file a written complaint under § 386.12(b) of this subchapter.

PART 395—HOURS OF SERVICE OF DRIVERS

■ 10. The authority citation for part 395 continues to read as follows:

Authority: 49 U.S.C. 504, 31133, 31136, 31137, and 31502; sec. 113, Pub. L. 103–311, 108 Stat. 1673, 1676; sec. 229, Pub. L. 106–159 (as transferred by sec. 4115 and amended by secs. 4130–4132, Pub. L. 109–59, 119 Stat. 1144, 1726, 1743, 1744); sec. 4133, Pub. L. 109–59, 119 Stat. 1144, 1744; sec. 108, Pub. L. 110–432, 122 Stat. 4860–4866; sec. 32934, Pub. L. 112–141, 126 Stat. 405, 830; and 49 CFR 1.87.

■ 11. Redesignate § 395.1 through § 395.15 as subpart A, and add a new subpart heading to read as follows:

Subpart A—General

■ 12. Amend § 395.1 by revising the introductory text of paragraphs (e)(1) and (e)(2) to read as follows:

§ 395.1 Scope of rules in this part.

* * * * *

(e) * * *

(1) *100 air-mile radius driver.* A driver is exempt from the requirements of § 395.8 and § 395.11 if:

* * * * *

(2) *Operators of property-carrying commercial motor vehicles not requiring a commercial driver's license.* Except as provided in this paragraph, a driver is exempt from the requirements of §§ 395.3(a)(2), 395.8, and 395.11 and ineligible to use the provisions of § 395.1(e)(1), (g), and (o) if:

* * * * *

■ 13. Amend § 395.2 by adding definitions for *Electronic logging device (ELD), ELD record,* and *Supporting document,* in alphabetical order, to read as follows:

§ 395.2 Definitions.

* * * * *

Electronic logging device (ELD) means a device or technology that automatically records a driver's driving time and facilitates the accurate recording of the driver's hours of service, and that meets the requirements of subpart B of this part.

ELD record means a record of duty status, recorded on an ELD, that reflects the data elements that an ELD must capture.

* * * * *

Supporting document means a document, in any medium, generated or received by a motor carrier in the normal course of business as described in § 395.11 that can be used, as produced or with additional identifying information, by the motor carrier and enforcement officials to verify the accuracy of a driver's record of duty status.

* * * * *

■ 14. Amend § 395.8 by:

■ a. Revising paragraphs (a) and (e),

■ b. Removing and reserving paragraph (i), and

■ c. Revising the heading of paragraph (k), and paragraph (k)(1) to read as follows:

§ 395.8 Driver's record of duty status.

(a)(1) Except for a private motor carrier of passengers (nonbusiness), as defined in § 390.5 of this subchapter, a motor carrier subject to the requirements of this part must require each driver used by the motor carrier to record the driver's duty status for each 24-hour period using the method prescribed in paragraphs (a)(1)(i) through (iv) of this section, as applicable.

(i) Subject to paragraphs (a)(1)(ii) and (iii) of this section, a motor carrier operating commercial motor vehicles must install and require each of its drivers to use an ELD to record the driver's duty status in accordance with subpart B of this part no later than December 18, 2017.

(ii) A motor carrier that installs and requires a driver to use an automatic on-board recording device in accordance

with § 395.15 before December 18, 2017 may continue to use the compliant automatic on-board recording device no later than December 16, 2019.

(iii)(A) A motor carrier may require a driver to record the driver's duty status manually in accordance with this section, rather than require the use of an ELD, if the driver is operating a commercial motor vehicle:

(*1*) In a manner requiring completion of a record of duty status on not more than 8 days within any 30-day period;

(*2*) In a driveaway-towaway operation in which the vehicle being driven is part of the shipment being delivered; or

(*3*) That was manufactured before model year 2000.

(B) The record of duty status must be recorded in duplicate for each 24-hour period for which recording is required. The duty status shall be recorded on a specified grid, as shown in paragraph (g) of this section. The grid and the requirements of paragraph (d) of this section may be combined with any company form.

(iv) Subject to paragraphs (a)(1)(i) through (iii) of this section, until December 18, 2017, a motor carrier operating commercial motor vehicles shall require each of its drivers to record the driver's record of duty status:

(A) Using an ELD that meets the requirements of subpart B of this part;

(B) Using an automatic on-board recording device that meets the requirements of § 395.15; or

(C) Manually, recorded on a specified grid as shown in paragraph (g) of this section. The grid and the requirements of paragraph (d) of this section may be combined with any company form. The record of duty status must be recorded in duplicate for each 24-hour period for which recording is required.

(2) A driver operating a commercial motor vehicle must:

(i) Record the driver's duty status using one of the methods under paragraph (a)(1) of this section; and

(ii) Submit the driver's record of duty status to the motor carrier within 13 days of the 24-hour period to which the record pertains.

* * * * *

(e)(1) No driver or motor carrier may make a false report in connection with a duty status.

(2) No driver or motor carrier may disable, deactivate, disengage, jam, or otherwise block or degrade a signal transmission or reception, or reengineer, reprogram, or otherwise tamper with an automatic on-board recording device or ELD so that the device does not accurately record and retain required data.

(3) No driver or motor carrier may permit or require another person to disable, deactivate, disengage, jam, or otherwise block or degrade a signal transmission or reception, or reengineer, reprogram, or otherwise tamper with an automatic on-board recording device or ELD so that the device does not accurately record and retain required data.

* * * * *

(i) [Reserved]

* * * * *

(k) *Retention of driver's record of duty status and supporting documents.* (1) A motor carrier shall retain records of duty status and supporting documents required under this part for each of its drivers for a period of not less than 6 months from the date of receipt.

* * * * *

■ 15. Add § 395.11 to read as follows:

§ 395.11 Supporting documents.

(a) *Effective date.* This section takes effect December 18, 2017.

(b) *Submission of supporting documents to motor carrier.* Except drivers for a private motor carrier of passengers (nonbusiness), a driver must submit to the driver's employer the driver's supporting documents within 13 days of either the 24-hour period to which the documents pertain or the day the document comes into the driver's possession, whichever is later.

(c) *Supporting document retention.* (1) Subject to paragraph (d) of this section, a motor carrier must retain each supporting document generated or received in the normal course of business in the following categories for each of its drivers for every 24-hour period to verify on-duty not driving time in accordance with § 395.8(k):

(i) Each bill of lading, itinerary, schedule, or equivalent document that indicates the origin and destination of each trip;

(ii) Each dispatch record, trip record, or equivalent document;

(iii) Each expense receipt related to any on-duty not driving time;

(iv) Each electronic mobile communication record, reflecting communications transmitted through a fleet management system; and

(v) Each payroll record, settlement sheet, or equivalent document that indicates payment to a driver.

(2)(i) A supporting document must include each of the following data elements:

(A) On the document or on another document that enables the carrier to link the document to the driver, the driver's name or personal identification number (PIN) or a unit (vehicle) number if the unit number can be associated with the driver operating the unit;

(B) The date, which must be the date at the location where the date is recorded;

(C) The location, which must include the name of the nearest city, town, or village to enable Federal, State, or local enforcement personnel to quickly determine a vehicle's location on a standard map or road atlas; and

(D) Subject to paragraph (c)(2)(ii) of this section, the time, which must be convertible to the local time at the location where it is recorded.

(ii) If a driver has fewer than eight supporting documents containing the four data elements under paragraph (c)(2)(i) of this section for a 24-hour period, a document containing the data elements under paragraphs (c)(2)(i)(A) through (C) of this section is considered a supporting document for purposes of paragraph (d) of this section.

(d) *Maximum number of supporting documents.* (1) Subject to paragraphs (d)(3) and (4) of this section, a motor carrier need not retain more than eight supporting documents for an individual driver's 24-hour period under paragraph (c) of this section.

(2) In applying the limit on the number of documents required under paragraph (d)(1) of this section, each electronic mobile communication record applicable to an individual driver's 24-hour period shall be counted as a single document.

(3) If a motor carrier has more than eight supporting documents for a driver's 24 hour period, the motor carrier must retain the supporting documents containing the earliest and the latest time indications among the eight supporting documents retained.

(4) In addition to other supporting documents required under this section, and notwithstanding the maximum number of documents under paragraph (d)(1) of this section, a motor carrier that requires a driver to complete a paper record of duty status under § 395.8(a)(1)(iii) must maintain toll receipts for any period when the driver kept paper records of duty status.

(e) *Link to driver's record of duty status.* A motor carrier must retain supporting documents in such a manner that they may be effectively matched to the corresponding driver's record of duty status.

(f) *Prohibition of destruction.* No motor carrier or driver may obscure, deface, destroy, mutilate, or alter existing information contained in a supporting document.

(g) *Supporting documents at roadside.* (1) Upon request during a roadside inspection, a driver must make available

to an authorized Federal, State, or local official for the official's review any supporting document in the driver's possession.

(2) A driver need not produce a supporting document under paragraph (g)(1) of this section in a format other than the format in which the driver possesses it.

(h) *Self-compliance systems.* (1) FMCSA may authorize on a case-by-case basis motor carrier self-compliance systems.

(2) Requests for use of a supporting document self-compliance system may be submitted to FMCSA under the procedures described in 49 CFR part 381, subpart C (Procedures for Applying for Exemptions).

(3) FMCSA will consider requests concerning types of supporting documents retained by a motor carrier under § 395.8(k)(1) and the method by which a driver retains a copy of the record of duty status for the previous 7 days and makes it available for inspection while on duty in accordance with § 395.8.

■ 16. Amend § 395.15 by revising paragraph (a) to read as follows:

§ 395.15 Automatic on-board recording devices.

(a) *Authority to use.* (1) A motor carrier that installs and requires a driver to use an automatic on-board recording device in accordance with this section before December 18, 2017 may continue to use the compliant automatic on-board recording device no later than December 16, 2019. Otherwise, the authority to use automatic on-board recording devices under this section ends on December 18, 2017.

(2) In accordance with paragraph (a)(1) of this section, a motor carrier may require a driver to use an automatic on-board recording device to record the driver's hours of service.

(3) Every driver required by a motor carrier to use an automatic on-board recording device shall use such device to record the driver's hours of service.

* * * * *

§§ 395.16–395.19 [Added and Reserved]

■ 17. Add and reserve §§ 395.16 through 395.19 in subpart A.

■ 18. Amend part 395 by adding a new subpart B, consisting of §§ 395.20 through 395.38, and Appendix A to Subpart B of Part 395, to read as follows:

Subpart B—Electronic Logging Devices (ELDs)

Sec.

Subpart B—Electronic Logging Devices (ELDs)

§ 395.20 ELD applicability and scope.

(a) *Scope.* This subpart applies to ELDs used to record a driver's hours of service under § 395.8(a).

(b) *Applicability.* An ELD used after December 18, 2017 must meet the requirements of this subpart.

§ 395.22 Motor carrier responsibilities—In general.

(a) *Registered ELD required.* A motor carrier required to use an ELD must use only an ELD that is listed on the Federal Motor Carrier Safety Administration's registered ELDs list, accessible through the Agency's Web site, *www.fmcsa.dot.gov/devices.*

(b) *User rights management.* (1) This paragraph applies to a motor carrier whose drivers use ELDs and to the motor carrier's support personnel who have been authorized by the motor carrier to access ELD records and make or suggest authorized edits.

(2) A motor carrier must:

(i) Manage ELD accounts, including creating, deactivating, and updating accounts, and ensure that properly authenticated individuals have ELD accounts with appropriate rights;

(ii) Assign a unique ELD username to each user account with the required user identification data;

(iii) Ensure that a driver's license used in the creation of an ELD driver account is valid and corresponds to the driver using the ELD account; and

(iv) Ensure that information entered to create a new account is accurate.

(c) *Driver identification data.* (1) The ELD user account assigned by the motor carrier to a driver requires the following data elements:

(i) A driver's first and last name, as reflected on the driver's license;

(ii) A unique ELD username selected by the motor carrier;

(iii) The driver's valid driver's license number; and

(iv) The State or jurisdiction that issued the driver's license.

(2) The driver's license number or Social Security number must not be used as, or as part of, the username for the account created on an ELD.

(d) *Motor carrier support personnel identification data.* The ELD user account assigned by a motor carrier to support personnel requires the following data elements:

(1) The individual's first and last name, as reflected on a government issued identification; and

(2) A unique ELD username selected by the motor carrier.

(e) *Proper log-in required.* The motor carrier must require that its drivers and support personnel log into the ELD system using their proper identification data.

(f) *Calibration.* A motor carrier must ensure that an ELD is calibrated and maintained in accordance with the provider's specifications.

(g) *Portable ELDs.* If a driver uses a portable ELD, the motor carrier shall ensure that the ELD is mounted in a fixed position during the operation of the commercial motor vehicle and visible to the driver when the driver is seated in the normal driving position.

(h) *In-vehicle information.* A motor carrier must ensure that its drivers possess onboard a commercial motor vehicle an ELD information packet containing the following items:

(1) A user's manual for the driver describing how to operate the ELD;

(2) An instruction sheet for the driver describing the data transfer mechanisms supported by the ELD and step-by-step instructions for the driver to produce and transfer the driver's hours-of-service records to an authorized safety official;

(3) An instruction sheet for the driver describing ELD malfunction reporting requirements and recordkeeping procedures during ELD malfunctions; and

(4) A supply of blank driver's records of duty status graph-grids sufficient to record the driver's duty status and other related information for a minimum of 8 days.

(i) *Record backup and security.* (1) A motor carrier must retain for 6 months a back-up copy of the ELD records on a device separate from that on which the original data are stored.

(2) A motor carrier must retain a driver's ELD records so as to protect a driver's privacy in a manner consistent with sound business practices.

(j) *Record production.* When requested by an authorized safety official, a motor carrier must produce ELD records in an electronic format either at the time of the request or, if the motor carrier has multiple offices or terminals, within the time permitted under § 390.29 of this subchapter.

§ 395.24 Driver responsibilities—In general.

(a) *In general.* A driver must provide the information the ELD requires as prompted by the ELD and required by the motor carrier.

(b) *Driver's duty status.* A driver must input the driver's duty status by selecting among the following categories available on the ELD:

(1) ''Off duty'' or ''OFF'' or ''1'';

(2) ''Sleeper berth'' or ''SB'' or ''2'', to be used only if sleeper berth is used;

(3) ''Driving'' or ''D'' or ''3''; or

(4) ''On-duty not driving'' or ''ON'' or ''4''.

(c) *Miscellaneous data.* (1) A driver must manually input the following information in the ELD:

(i) Annotations, when applicable;

(ii) Driver's location description, when prompted by the ELD; and

(iii) Output file comment, when directed by an authorized safety officer.

(2) A driver must manually input or verify the following information on the ELD:

(i) Commercial motor vehicle power unit number;

(ii) Trailer number(s), if applicable; and

(iii) Shipping document number, if applicable.

(d) *Driver use of ELD.* On request by an authorized safety official, a driver must produce and transfer from an ELD the driver's hours-of-service records in accordance with the instruction sheet provided by the motor carrier.

§ 395.26 ELD data automatically recorded.

(a) *In general.* An ELD provides the following functions and automatically records the data elements listed in this section in accordance with the requirements contained in appendix A to subpart B of this part.

(b) *Data automatically recorded.* The ELD automatically records the following data elements:

(1) Date;

(2) Time;

(3) CMV geographic location information;

(4) Engine hours;

(5) Vehicle miles;

(6) Driver or authenticated user identification data;

(7) Vehicle identification data; and

(8) Motor carrier identification data.

(c) *Change of duty status.* When a driver indicates a change of duty status under § 395.24(b), the ELD records the data elements in paragraphs (b)(1) through (8) of this section.

(d) *Intermediate recording.* (1) When a commercial motor vehicle is in motion and there has not been a duty status change or another intermediate recording in the previous 1 hour, the ELD automatically records an intermediate recording that includes the data elements in paragraphs (b)(1) through (8) of this section.

(2) If the intermediate recording is created during a period when the driver indicates authorized personal use of a commercial motor vehicle, the data elements in paragraphs (b)(4) and (5) of this section (engine hours and vehicle miles) will be left blank and paragraph (b)(3) of this section (location) will be recorded with a single decimal point resolution (approximately within a 10-mile radius).

(e) *Change in special driving category.* If a driver indicates a change in status under § 395.28(a)(2), the ELD records the data elements in paragraphs (b)(1) through (8) of this section.

(f) *Certification of the driver's daily record.* The ELD provides a function for recording the driver's certification of the driver's records for every 24-hour period. When a driver certifies or recertifies the driver's records for a given 24-hour period under § 395.30(b)(2), the ELD records the date, time and driver identification data elements in paragraphs (b)(1), (2), and (6) of this section.

(g) *Log in/log out.* When an authorized user logs into or out of an ELD, the ELD records the data elements in paragraphs (b)(1) and (2) and (b)(4) through (8) of this section.

(h) *Engine power up/shut down.* When a commercial motor vehicle's engine is powered up or powered down, the ELD records the data elements in paragraphs (b)(1) through (8) of this section.

(i) *Authorized personal use.* If the record is created during a period when the driver has indicated authorized personal use of a commercial motor vehicle, the data element in paragraph (b)(3) of this section is logged with a single decimal point resolution (approximately within a 10-mile radius).

(j) *Malfunction and data diagnostic event.* When an ELD detects or clears a malfunction or data diagnostic event, the ELD records the data elements in paragraphs (b)(1) and (2) and (b)(4) through (8) of this section.

§ 395.28 Special driving categories; other driving statuses.

(a) *Special driving categories*—(1) *Motor carrier options.* A motor carrier may configure an ELD to authorize a driver to indicate that the driver is operating a commercial motor vehicle under any of the following special driving categories:

(i) Authorized personal use; and

(ii) Yard moves.

(2) *Driver's responsibilities.* A driver operating a commercial motor vehicle under one of the authorized categories listed in paragraph (a)(1) of this section:

(i) Must select on the ELD the applicable special driving category before the start of the status and deselect when the indicated status ends; and

(ii) When prompted by the ELD, annotate the driver's ELD record describing the driver's activity.

(b) *Drivers exempt from ELD use.* A motor carrier may configure an ELD to designate a driver as exempt from ELD use.

(c) *Other driving statuses.* A driver operating a commercial motor vehicle under any exception under § 390.3(f) of this subchapter or § 395.1 who is not covered under paragraph (a) or (b) of this section must annotate the driver's ELD record to explain the applicable exemption.

§ 395.30 ELD record submissions, edits, annotations, and data retention.

(a) *Accurate record keeping.* A driver and the motor carrier must ensure that the driver's ELD records are accurate.

(b) *Review of records and certification by driver.* (1) A driver must review the driver's ELD records, edit and correct inaccurate records, enter any missing information, and certify the accuracy of the information.

(2) Using the certification function of the ELD, the driver must certify the driver's records by affirmatively selecting ''Agree'' immediately following a statement that reads, ''I hereby certify that my data entries and my record of duty status for this 24-hour period are true and correct.'' The driver must certify the record immediately after the final required entry has been made or corrected for the 24-hour period.

(3) The driver must submit the driver's certified ELD records to the motor carrier in accordance with § 395.8(a)(2).

(4) If any edits are necessary after the driver submits the records to the motor carrier, the driver must recertify the record after the edits are made.

(c) *Edits, entries, and annotations.* (1) Subject to the edit limitations of an ELD, a driver may edit, enter missing information, and annotate ELD recorded events. When edits, additions, or annotations are necessary, a driver must use the ELD and respond to the ELD's prompts.

(2) The driver or support personnel must annotate each change or addition to a record.

(3) In the case of team drivers, if there were a mistake resulting in the wrong driver being assigned driving-time hours

by the ELD, and if the team drivers were both indicated in each other's records for that period as co-drivers, driving time may be edited and reassigned between the team drivers following the procedure supported by the ELD.

(d) *Motor carrier-proposed edits.* (1) On review of a driver's submitted records, the motor carrier may request edits to a driver's records of duty status to ensure accuracy. A driver must confirm or reject any proposed change, implement the appropriate edits on the driver's record of duty status, and recertify and resubmit the records in order for any motor carrier-proposed changes to take effect.

(2) A motor carrier may not request edits to the driver's electronic records before the records have been submitted by the driver.

(3) Edits requested by any system or by any person other than the driver must require the driver's electronic confirmation or rejection.

(e) *Coercion prohibited.* A motor carrier may not coerce a driver to make a false certification of the driver's data entries or record of duty status.

(f) *Motor carrier data retention requirements.* A motor carrier must not alter or erase, or permit or require alteration or erasure of, the original information collected concerning the driver's hours of service, the source data streams used to provide that information, or information contained in any ELD that uses the original information and HOS source data.

§ 395.32 Non-authenticated driver logs.

(a) *Tracking non-authenticated operation.* The ELD must associate the non-authenticated operation of a commercial motor vehicle with a single account labeled ''Unidentified Driver'' as soon as the vehicle is in motion, if no driver has logged into the ELD.

(b) *Driver.* When a driver logs into an ELD, the driver must review any unassigned driving time when prompted by the ELD and must:

(1) Assume any records that belong to the driver under the driver's account; or

(2) Indicate that the records are not attributable to the driver.

(c) *Motor carrier.* (1) A motor carrier must ensure that records of unidentified driving are reviewed and must:

(i) Annotate the record, explaining why the time is unassigned; or

(ii) Assign the record to the appropriate driver to correctly reflect the driver's hours of service.

(2) A motor carrier must retain unidentified driving records for each ELD for a minimum of 6 months from the date of receipt.

(3) During a safety inspection, audit or investigation by an authorized safety official, a motor carrier must make available unidentified driving records from the ELD corresponding to the time period for which ELD records are required.

§ 395.34 ELD malfunctions and data diagnostic events.

(a) *Recordkeeping during ELD malfunctions.* In case of an ELD malfunction, a driver must do the following:

(1) Note the malfunction of the ELD and provide written notice of the malfunction to the motor carrier within 24 hours;

(2) Reconstruct the record of duty status for the current 24-hour period and the previous 7 consecutive days, and record the records of duty status on graph-grid paper logs that comply with § 395.8, unless the driver already possesses the records or the records are retrievable from the ELD; and

(3) Continue to manually prepare a record of duty status in accordance with § 395.8 until the ELD is serviced and brought back into compliance with this subpart.

(b) *Inspections during malfunctions.* When a driver is inspected for hours of service compliance during an ELD malfunction, the driver must provide the authorized safety official the driver's records of duty status manually kept as specified under paragraphs (a)(2) and (3) of this section.

(c) *Driver requirements during ELD data diagnostic events.* If an ELD indicates that there is a data inconsistency that generates a data diagnostic event, the driver must follow the motor carrier's and ELD provider's recommendations in resolving the data inconsistency.

(d) *Motor carrier requirements for repair, replacement, or service.* (1) If a motor carrier receives or discovers information concerning the malfunction of an ELD, the motor carrier must take actions to correct the malfunction of the ELD within 8 days of discovery of the condition or a driver's notification to the motor carrier, whichever occurs first.

(2) A motor carrier seeking to extend the period of time permitted for repair, replacement, or service of one or more ELDs shall notify the FMCSA Division Administrator for the State of the motor carrier's principal place of business within 5 days after a driver notifies the motor carrier under paragraph (a)(1) of this section. Each request for an extension under this section must be signed by the motor carrier and must contain:

(i) The name, address, and telephone number of the motor carrier representative who files the request;

(ii) The make, model, and serial number of each ELD;

(iii) The date and location of each ELD malfunction as reported by the driver to the carrier; and

(iv) A concise statement describing actions taken by the motor carrier to make a good faith effort to repair, replace, or service the ELD units, including why the carrier needs additional time beyond the 8 days provided by this section.

(3) If FMCSA determines that the motor carrier is continuing to make a good faith effort to ensure repair, replacement, or service to address the malfunction of each ELD, FMCSA may allow an additional period.

(4) FMCSA will provide written notice to the motor carrier of its determination. The determination may include any conditions that FMCSA considers necessary to ensure hours-of-service compliance. The determination shall constitute a final agency action.

(5) A motor carrier providing a request for extension that meets the requirements of paragraph (d)(2) of this section is deemed in compliance with § 395.8(a)(1)(i) and (a)(2) until FMCSA makes an extension determination under this section, provided the motor carrier and driver continue to comply with the other requirements of this section.

§ 395.36 Driver access to records.

(a) *Records on ELD.* Drivers must be able to access their own ELD records. A motor carrier must not introduce a process that would require a driver to go through the motor carrier to obtain copies of the driver's own ELD records if such records exist on or are automatically retrievable through the ELD operated by the driver.

(b) *Records in motor carrier's possession.* On request, a motor carrier must provide a driver with access to and copies of the driver's own ELD records unavailable under paragraph (a) of this section during the period a motor carrier is required to retain the records under § 395.8(k).

§ 395.38 Incorporation by reference.

(a) *Incorporation by reference.* Certain materials are incorporated by reference in part 395, with the approval of the Director of the Office of the Federal Register under 5 U.S.C. 552(a), and 1 CFR part 51. To enforce any edition other than that specified in this section, the Federal Motor Carrier Safety Administration must publish notice of the change in the **Federal Register**, and

the material must be available to the public. All approved material is available for inspection at the Federal Motor Carrier Safety Administration, Office of Analysis, Research and Technology, (800) 832–5660, and is available from the sources listed below. It is also available for inspection at the National Archives and Records Administration (NARA). For information on the availability of this material at NARA, call 202–741–6030 or go to *http://www.archives.gov/federal_register/code_of_federal_regulations/ibr_locations.html*.

(b) *American National Standards Institute (ANSI).* 11 West 42nd Street, New York, New York 10036, *http://webstore.ansi.org*, (212) 642–4900.

(1) ANSI INCITS 4–1986 (R2012), American National Standard for Information Systems—Coded Character Sets—7-Bit American National Standard Code for Information Interchange (7-Bit ASCII), approved June 14, 2007, IBR in section 4.8.2.1, Appendix A to subpart B.

(2) ANSI INCITS 446–2008 (R2013), American National Standard for Information Technology—Identifying Attributes for Named Physical and Cultural Geographic Features (Except Roads and Highways) of the United States, Territories, Outlying Areas, and Freely Associated Areas, and the Waters of the Same to the Limit of the Twelve-Mile Statutory Zone, approved October 28, 2008, IBR in section 4.4.2, Appendix A to subpart B.

(c) *Bluetooth SIG, Inc.* 5209 Lake Washington Blvd. NE., Suite 350, Kirkland, WA 98033, *https://www.bluetooth.org/Technical/Specifications/adopted.htm*, (425) 691–3535.

(1) Bluetooth SIG, Inc., Specification of the Bluetooth System: Wireless Connections Made Easy, Covered Core Package version 2.1 + EDR, volumes 0 through 4, approved July 26, 2007, IBR in sections 4.9.1, 4.9.2, 4.10.1.4, 4.10.2, Appendix A to subpart B.

(2) [Reserved]

(d) *Institute of Electrical and Electronic Engineers (IEEE) Standards Association.* 445 Hoes Lane, Piscataway, NJ 08854–4141, *http://standards.ieee.org/index.html*, (732) 981–0060.

(1) IEEE Std 1667–2009, IEEE Standard for Authentication in Host Attachments of Transient Storage Devices, approved 11 November 2009, IBR in section 4.10.1.3, Appendix A to subpart B.

(2) [Reserved]

(e) *Internet Engineering Task Force (IETF).* C/o Association Management Solutions, LLC (AMS) 48377 Freemont Blvd., Suite 117, Freemont, CA 94538, (510) 492–4080.

(1) IETF RFC 3565, Use of the Advanced Encryption Standard (AES) Encryption Algorithm in Cryptographic Message Syntax (CMS), approved July 2003, IBR in section 4.10.1.2, Appendix A to subpart B.

(2) IETF RFC 4056, Use of the RSASSA–PSS Signature Algorithm in Cryptographic Message Syntax (CMS), approved June 2005, IBR in section 4.10.1.2, Appendix A to subpart B.

(3) IETF RFC 5246, The Transport Layer Security (TLS) Protocol Version 1.2, approved August 2008, IBR in section 4.10.1.1, Appendix A to subpart B.

(4) IETF RFC 5321, Simple Mail Transfer Protocol, approved October 2008, IBR in section 4.10.1.2, Appendix A to subpart B.

(5) IETF RFC 5322, Internet Message Format, approved October 2008, IBR in section 4.10.1.2, Appendix A to subpart B.

(6) IETF RFC 5751, Secure/Multipurpose Internet Mail Extensions (S/MIME) Version 3.2, Message Specification, approved January 2010, IBR in section 4.10.1.2, Appendix A to subpart B.

(7) IETF RFC 7230, Hypertext Transfer Protocol (HTTP/1.1): Message Syntax and Routing, approved June 2014, IBR in section 4.10.1.1, Appendix A to subpart B.

(8) IETF RFC 7231, Hypertext Transfer Protocol (HTTP/1.1): Semantics and Content, approved June 2014, IBR in section 4.10.1.1, Appendix A to subpart B.

(f) *National Institute of Standards and Technology (NIST).* 100 Bureau Drive, Stop 1070, Gaithersburg, MD 20899–1070, *http://www.nist.gov*, (301) 975–6478.

(1) Federal Information Processing Standards Publication (FIPS PUB) 197, Advanced Encryption Standard (AES), approved November 26, 2001, IBR in sections 4.10.1.2 and 4.10.1.3, Appendix A to subpart B.

(2) SP 800–32, Introduction to Public Key Technology and the Federal PKI Infrastructure, approved February 26, 2001, IBR in section 4.10.1.2, Appendix A to subpart B.

(g) *Universal Serial Bus Implementers Forum (USBIF).* 3855 SW. 153rd Drive, Beaverton, Oregon 97006, *http://www.usb.org*, (503) 619–0426.

(1) USB Implementers Forum, Inc., Universal Serial Bus Specification, Revision 2.0, approved April 27, 2000, as revised through April 3, 2015, IBR in sections 4.9.1, 4.9.2, 4.10.1.3, and 4.10.2, Appendix A to subpart B.

(2) [Reserved]

(h) *World Wide Web Consortium (W3C).* 32 Vassar Street, Building 32–G514, Cambridge, MA 02139, *http://www.w3.org*, (617) 253–2613.

(1) W3C Recommendation 27, SOAP Version 1.2 Part 1: Messaging Framework (Second Edition), including errata, approved April 2007, IBR in section 4.10.1.1, Appendix A to subpart B.

(2) [Reserved]

Appendix A to Subpart B of Part 395—Functional Specifications for All Electronic Logging Devices (ELDs)

Table of Contents

1. Scope and Description

(a) This appendix specifies the minimal requirements for an electronic logging device (ELD) necessary for an ELD provider to build and certify that its technology is compliant with this appendix.

1.1. ELD Function

The ELD discussed in this appendix is an electronic module capable of recording the electronic records of duty status for CMV drivers using the unit in a driving environment within a CMV and meets the compliance requirements in this appendix.

1.2. System Users

Users of ELDs are:

(a) CMV drivers employed by a motor carrier; and

(b) Support personnel who have been authorized by the motor carrier to:

(1) Create, remove, and manage user accounts;

(2) Configure allowed ELD parameters; and

(3) Access, review, and manage drivers' ELD records on behalf of the motor carrier.

1.3. System Architecture

An ELD may be implemented as a stand-alone technology or within another electronic module. It may be installed in a CMV or may be implemented on a handheld unit that may be moved from vehicle to vehicle. The functional requirements are the same for all types of system architecture that may be used in implementing the ELD functionality.

1.4. System Design

(a) An ELD is integrally synchronized with the engine of the CMV such that driving time can be automatically recorded for the driver operating the CMV and using the ELD.

(b) An ELD allows for manual inputs from the driver and the motor carrier support personnel and automatically captures date and time, vehicle position, and vehicle operational parameters.

(c) An ELD records a driver's electronic RODS and other supporting events with the required data elements specified in this appendix and retains data to support the performance requirements specified in this appendix.

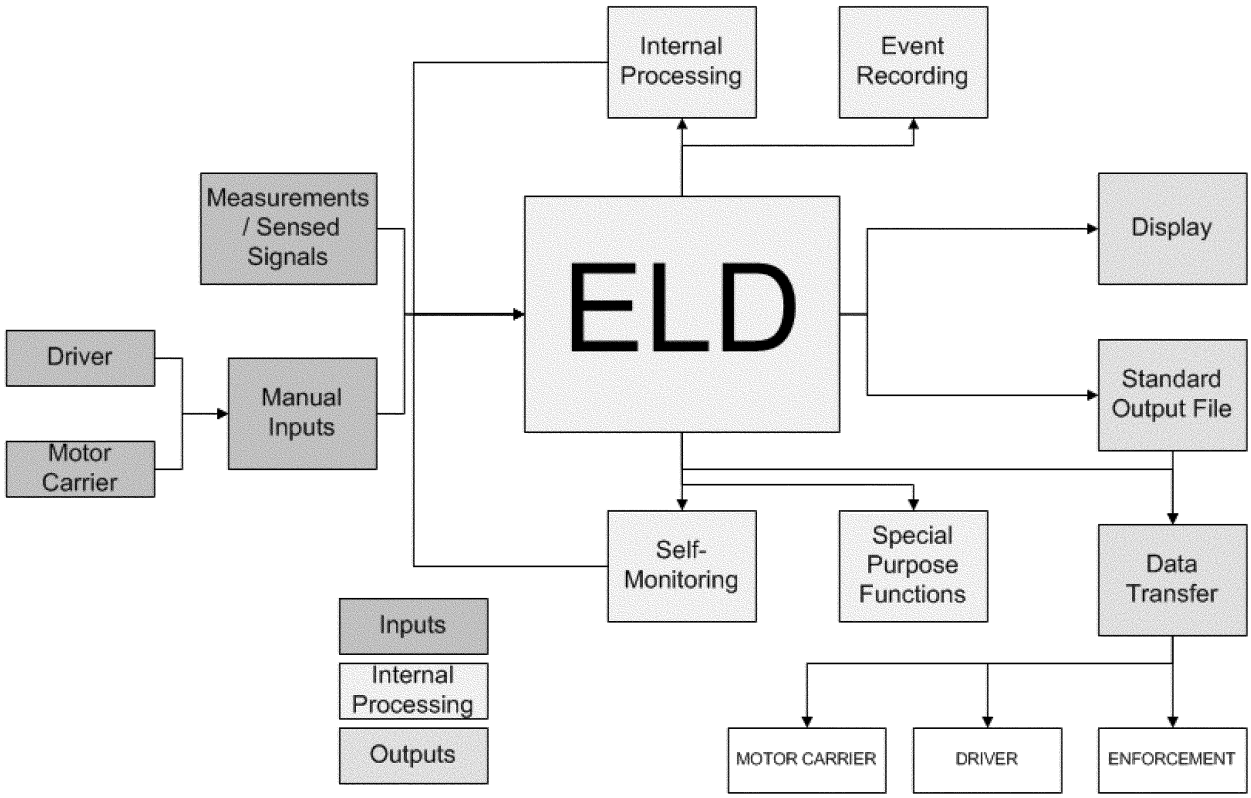
(d) An ELD generates a standard data file output and transfers it to an authorized safety official upon request.

(e) This appendix specifies minimally required data elements that must be part of an event record such that a standard ELD output file can be produced by all compliant ELDs.

(f) Figure 1 provides a visual layout of how this appendix is generally organized to further explain the required sub-functions of an ELD.

Figure 1

A Pictorial Overview of an ELD's Inputs, Outputs, and Other Sub-Functions



1.5. Sections of Appendix

(a) Section 2 lists the abbreviations used throughout this appendix.

(b) Section 3 provides definitions for terms and notations used in this document.

(c) Section 4 lists functional requirements for an ELD. More specifically, section 4.1 describes the security requirements for account management within an ELD system and introduces the term ''Unidentified Driver'' account. Section 4.2 explains internal engine synchronization requirements and its applicability when used in recording a driver's record of duty status in CMVs. Section 4.3 describes the inputs of an ELD which includes automatically measured signals by the ELD as covered in section 4.3.1, and manual entries by the authenticated driver as covered in section 4.3.2 and by the motor carrier as covered in section 4.3.3. The ELD requirements for internal processing and tracking of information flow are described in section 4.4, which includes conditions for and prohibitions against automatic setting of duty-status in section 4.4.1, required geo-location and date and time conversion functions in sections 4.4.2 and 4.4.3, respectively, use of event attributes for tracking of edit and entry history in section 4.4.4, and the use of data check functions in the recording of ELD logs in section 4.4.5 as standard security measures for all ELDs. Section 4.5 describes the events an ELD must record and the data elements each type of event must include. Section 4.6 introduces device self-monitoring requirements and standardizes the minimal set of malfunctions and data diagnostic events an ELD must be able to detect. Section 4.7 introduces technical functions that are intended to guard a driver against harassment and introduces a privacy preserving provision when a driver operates a CMV for personal purposes. Section 4.8 explains ELD outputs, which are the information displayed to a user and the standard data output file an ELD must produce. Sections 4.9 and 4.10, respectively, describe the data reporting requirements and the communications protocols.

(d) Section 5 describes the ELD certification and registration process.

(e) Section 6 lists the cited references throughout this appendix.

(f) Section 7 provides a data elements dictionary referencing each data element identified in this appendix.

2. Abbreviations

3pDP Third-Party Developers' Partnership
ASCII American Standard Code for Information Interchange
CAN Control Area Network
CMV Commercial Motor Vehicle
ECM Electronic Control Module
ELD Electronic Logging Device
FMCSA Federal Motor Carrier Safety Administration
HOS Hours of Service
HTTP Hypertext Transfer Protocol
HTTPS Hypertext Transfer Protocol Secure
ICD Interface Control Document
SAFER Safety and Fitness Electronic Records
RFC Request for Comments
RODS Records of Duty Status
TLS Transport Layer Security
UCT Coordinated Universal Time
USB Universal Serial Bus
WSDL Web Services Definition Language
XML Extensible Markup Language
XOR Exclusive Or {bitwise binary operation}

3. Definitions; Notations

3.1. Definitions

3.1.1. Databus

A vehicle databus refers to an internal communications network that interconnects components inside a vehicle and facilitates exchange of data between subsystems typically using serial or control area network protocols.

3.1.2. ELD Event

An ELD event refers to a discrete instance in time when the ELD records data with the data elements specified in this appendix. The discrete ELD events relate to the driver's duty status and ELD's operational integrity. They are either triggered by input from the driver (driver's duty status changes, driver's login/logout activity, etc.) or triggered by the ELD's internal monitoring functions (ELD malfunction detection, data diagnostics detection, intermediate logs, etc.). ELD events and required data elements for each type of ELD event are described in detail in section 4.5.1 of this appendix.

3.1.3. Exempt Driver

As specified in further detail in section 4.3.3.1.2 of this appendix, an ELD must allow a motor carrier to configure an ELD for a driver who may be exempt from the use of the ELD. An example of an exempt driver would be a driver operating under the short-haul exemption in § 395.1(e) of this part (100 air-mile radius driver and non-CDL 150-air mile radius driver). Even though exempt drivers do not have to use an ELD, in operations when an ELD equipped CMV may be shared between exempt and non-exempt drivers, motor carriers can use this allowed configuration to avoid issues with unidentified driver data diagnostics errors.

3.1.4. Geo-Location

Geo-location is the conversion of a position measurement in latitude/longitude coordinates into a description of the distance and direction to a recognizable nearby location name. Geo-location information is used on an ELD's display or printout.

3.1.5. Ignition Power Cycle, Ignition Power On Cycle, Ignition Power Off Cycle

(a) An ignition power cycle refers to the engine's power status changing from ''on to off'' or ''off to on'', typically with the driver controlling engine power status by switching the ignition key positions.

(b) An ignition power on cycle refers to the engine power sequence changing from ''off to on and then off''. This refers to a continuous period when a CMV's engine is powered.

(c) An ignition power off cycle refers to the engine power sequence changing from ''on to off and then on''. This refers to a continuous period when a CMV's engine is not powered.

3.1.6. Unidentified Driver

''Unidentified Driver'' refers to the operation of a CMV featuring an ELD without an authenticated driver logging in the system. Functional specifications in this appendix require an ELD to automatically capture driving time under such conditions and attribute such records to the unique ''Unidentified Driver account,'' as specified in section 4.1.5 of this appendix, until the motor carrier and the driver review the records and they are assigned to the true and correct owner, as described in § 395.32 of this part.

3.2. Notations

Throughout this appendix the following notations are used when data elements are referenced.

(a) < . > indicates a parameter an ELD must track. For example refers to the unique <ELD username> or identifier specified during the creation of an ELD account with the requirements set forth in section 7.18 of this appendix.

(b) { .} indicates which of multiple values of a parameter is being referenced. For example <ELD username {*for the co-driver*}> refers specifically to the ELD username for the co-driver.

(c) <CR> indicates a carriage return or new line or end of the current line. This notation is used in section 4.8.2 of this appendix, which describes the standard ELD output file.

4. Functional Requirements

4.1. ELD User Accounts

4.1.1. Account Types

An ELD must support a user account structure that separates drivers and motor carrier's support personnel (*i.e.* non-drivers).

4.1.2. Account Creation

(a) Each user of the ELD must have a valid active account on the ELD with a unique identifier assigned by the motor carrier.

(b) Each driver account must require the entry of the driver's license number and the State or jurisdiction that issued the driver's license into the ELD during the account creation process. The driver account must securely store this information on the ELD.

(c) An ELD must not allow creation of more than one driver account associated with a driver's license for a given motor carrier.

(d) A driver account must not have administrative rights to create new accounts on the ELD.

(e) A support personnel account must not allow recording of ELD data for its account holder.

(f) An ELD must reserve a unique driver account for recording events during non-authenticated operation of a CMV. This appendix will refer to this account as the ''unidentified driver account.''

4.1.3. Account Security

(a) An ELD must provide secure access to data recorded and stored on the system by requiring user authentication during system login.

(b) Driver accounts must only have access to data associated with that driver, protecting the authenticity and confidentiality of the collected information.

4.1.4. Account Management

(a) An ELD must be capable of separately recording and retaining ELD data for each individual driver using the ELD.

(b) An ELD must provide for and require concurrent authentication for team drivers.

(c) If more than one ELD unit is used to record a driver's electronic records within a motor carrier's operation, the ELD in the vehicle the driver is operating most recently must be able to produce a complete ELD report for that driver, on demand, for the current 24-hour period and the previous 7 consecutive days.

4.1.5. Non-Authenticated Operation

(a) An ELD must associate all non-authenticated operation of a CMV with a single ELD account labeled unidentified driver.

(b) If a driver does not log onto the ELD, as soon as the vehicle is in motion, the ELD must:

(1) Provide a visual or visual and audible warning reminding the driver to stop and log in to the ELD;

(2) Record accumulated driving and on-duty, not-driving, time in accordance with the ELD defaults described in section 4.4.1 of this appendix under the unidentified driver profile; and

(3) Not allow entry of any information into the ELD other than a response to the login prompt.

4.2. ELD-Vehicle Interface

(a) An ELD must be integrally synchronized with the engine of the CMV. Engine synchronization for purposes of ELD compliance means the monitoring of the vehicle's engine operation to automatically capture the engine's power status, vehicle's motion status, miles driven value, and engine hours value when the CMV's engine is powered.

(b) An ELD used while operating a CMV that is a model year 2000 or later model year, as indicated by the vehicle identification number (VIN), that has an engine electronic control module (ECM) must establish a link to the engine ECM when the CMV's engine is powered and receive automatically the engine's power status, vehicle's motion status, miles driven value, and engine hours value through the serial or Control Area Network communication protocols supported by the vehicle's engine ECM. If the vehicle does not have an ECM, an ELD may use alternative sources to obtain or estimate these

vehicle parameters with the listed accuracy requirements under section 4.3.1 of this appendix.

4.3. ELD Inputs

4.3.1. ELD Sensing

4.3.1.1. Engine Power Status

An ELD must be powered and become fully functional within 1 minute of the vehicle's engine receiving power and must remain powered for as long as the vehicle's engine stays powered.

4.3.1.2. Vehicle Motion Status

(a) An ELD must automatically determine whether a CMV is in motion or stopped by comparing the vehicle speed information with respect to a set speed threshold as follows:

(1) Once the vehicle speed exceeds the set speed threshold, it must be considered in motion.

(2) Once in motion, the vehicle must be considered in motion until its speed falls to 0 miles per hour and stays at 0 miles per hour for 3 consecutive seconds. Then, the vehicle will be considered stopped.

(3) An ELD's set speed threshold for determination of the in-motion state for the purpose of this section must not be configurable to greater than 5 miles per hour.

(b) If an ELD is required to have a link to the vehicle's engine ECM, vehicle speed information must be acquired from the engine ECM. Otherwise, vehicle speed information must be acquired using an independent source apart from the positioning services described under section 4.3.1.6 of this appendix and must be accurate within ±3 miles per hour of the CMV's true ground speed for purposes of determining the in-motion state for the CMV.

4.3.1.3. Vehicle Miles

(a) An ELD must monitor vehicle miles as accumulated by a CMV over the course of an ignition power on cycle (accumulated vehicle miles) and over the course of CMV's operation (total vehicle miles). Vehicle miles information must use or must be converted to units of whole miles.

(b) If the ELD is required to have a link to the vehicle's engine ECM as specified in section 4.2 of this appendix:

(1) The ELD must monitor the engine ECM's odometer message broadcast and use it to log total vehicle miles information; and

(2) The ELD must use the odometer message to determine accumulated vehicle miles since engine's last power on instance.

(c) If the ELD is not required to have a link to the vehicle's engine ECM as specified in section 4.2 of this appendix, the accumulated vehicle miles indication must be obtained or estimated from a source that is accurate to within ±10% of miles accumulated by the CMV over a 24-hour period as indicated on the vehicle's odometer display.

4.3.1.4. Engine Hours

(a) An ELD must monitor engine hours of the CMV over the course of an ignition power on cycle (elapsed engine hours) and over the course of the total engine hours of the CMV's operation. Engine hours must use or must be converted to hours in intervals of a tenth of an hour.

(b) If an ELD is required to have a link to the vehicle's engine ECM, the ELD must monitor the engine ECM's total engine hours message broadcast and use it to log total engine hours information. Otherwise, engine hours must be obtained or estimated from a source that monitors the ignition power of the CMV and must be accurate within ±0.1 hour of the engine's total operation within a given ignition power on cycle.

4.3.1.5. Date and Time

(a) The ELD must obtain and record the date and time information automatically without allowing any external input or interference from a motor carrier, driver, or any other person.

(b) The ELD time must be synchronized to Coordinated Universal Time (UCT) and the absolute deviation from UCT must not exceed 10 minutes at any point in time.

4.3.1.6. CMV Position

(a) An ELD must determine automatically the position of the CMV in standard latitude/longitude coordinates with the accuracy and availability requirements of this section.

(b) The ELD must obtain and record this information without allowing any external input or interference from a motor carrier, driver, or any other person.

(c) CMV position measurement must be accurate to ±0.5 mile of absolute position of the CMV when an ELD measures a valid latitude/longitude coordinate value.

(d) Position information must be obtained in or converted to standard signed latitude and longitude values and must be expressed as decimal degrees to hundreds of a degree precision (*i.e.,* a decimal point and two decimal places).

(e) Measurement accuracy combined with the reporting precision requirement implies that position reporting accuracy will be on the order of ±1mile of absolute position of the CMV during the course of a CMV's commercial operation.

(f) During periods of a driver's indication of personal use of the CMV, the measurement reporting precision requirement is reduced to tenths of a degree (*i.e.,* a decimal point and single decimal place) as further specified in section 4.7.3 of this appendix.

(g) An ELD must be able to acquire a valid position measurement at least once every 5 miles of driving; however, the ELD records CMV location information only during ELD events as specified in section 4.5.1 of this appendix.

4.3.1.7. CMV VIN

The vehicle identification number (VIN) for the power unit of a CMV must be automatically obtained from the engine ECM and recorded if it is available on the vehicle databus.

4.3.2. Driver's Manual Entries

(a) An ELD must prompt the driver to input information into the ELD only when the CMV is stationary and driver's duty status is not on-duty driving, except for the condition specified in section 4.4.1.2 of this appendix.

(b) If the driver's duty status is driving, an ELD must only allow the driver who is operating the CMV to change the driver's duty status to another duty status.

(c) A stopped vehicle must maintain zero (0) miles per hour speed to be considered stationary for purposes of information entry into an ELD.

(d) An ELD must allow an authenticated co-driver who is not driving, but who has logged into the ELD prior to the vehicle being in motion, to make entries over his or her own records when the vehicle is in motion. The ELD must not allow co-drivers to switch driving roles when the vehicle is in motion.

4.3.2.1. Driver's Entry of Required Event Data Fields

(a) An ELD must provide a means for a driver to enter information pertaining to the driver's ELD records manually, *e.g.,* CMV power unit number, as specified in section 7.4 of this appendix; trailer number(s), as specified in section 7.42; and shipping document number, as specified in section 7.39.

(b) If the motor carrier populates these fields automatically, the ELD must provide means for the driver to review such information and make corrections as necessary.

4.3.2.2. Driver's Status Inputs

4.3.2.2.1. Driver's Indication of Duty Status

(a) An ELD must provide a means for the authenticated driver to select a driver's duty status.

(b) The ELD must use the ELD duty status categories listed in Table 1 of this appendix.

Table 1

Duty Status Categories

Duty Status	Abbreviation	Data Coding
Off Duty	OFF	1
Sleeper Berth	SB	2
Driving	D	3
On-duty Not Driving	ON	4

4.3.2.2.2. Driver's Indication of Situations Impacting Driving Time Recording

(a) An ELD must provide the means for a driver to indicate the beginning and end of a period when the driver may use the CMV for authorized personal use or for performing yard moves. The ELD must acquire this status in a standard format from the category list in Table 2 of this appendix. This list must be supported independent of the duty status categories described in section 4.3.2.2.1 of this appendix.

Table 2

Categories for Driver's Indication of Situations Impacting Driving Time Recording

Category	Abbreviation	Data Coding
Authorized Personal Use of CMV	PC	1
Yard Moves	YM	2
Default: None	---	0

(b) An ELD must allow a driver to select only categories that a motor carrier enables by configuration for that driver, as described in section 4.3.3.1.1 of this appendix.

(c) An ELD must only allow one category to be selected at any given time and use the latest selection by the driver.

(d) The ELD must prompt the driver to enter an annotation upon selection of a category from Table 2 of this appendix and record the driver's entry.

(e) A driver's indication of special driving situation must reset to none if the ELD or CMV's engine goes through a power off cycle (ELD or CMV's engine turns off and then on) except if the driver has indicated authorized personal use of CMV. If the driver has indicated authorized personal use of the CMV, the ELD must require confirmation of continuation of the authorized personal use of CMV condition by the driver. If not confirmed by the driver and the vehicle is in motion, the ELD must default to none.

4.3.2.3. Driver's Certification of Records

(a) An ELD must include a function whereby a driver can certify the driver's records at the end of a 24-hour period.

(1) This function, when selected, must display a statement that reads ''I hereby certify that my data entries and my record of duty status for this 24-hour period are true and correct.''

(2) An ELD must prompt the driver to select ''Agree'' or ''Not ready.'' An ELD must record the driver's affirmative selection of ''Agree'' as an event.

(b) An ELD must only allow the authenticated driver to certify records associated with that driver.

(c) If any edits are necessary after the driver certifies the records for a given 24-hour period, the ELD must require and prompt the driver to re-certify the updated records.

(d) If there are any past records on the ELD (excluding the current 24-hour period) that require certification or re-certification by the driver, the ELD must indicate the required driver action on the ELD's display and prompt the driver to take the necessary action during the login and logout processes.

4.3.2.4. Driver's Data Transfer Initiation Input

(a) An ELD must provide a standardized single-step driver interface for compilation of driver's ELD records and initiation of the data transfer to authorized safety officials when requested during a roadside inspection.

(b) The ELD must input the data transfer request from the driver, require confirmation, present and request selection of the supported data transfer options by the ELD, and prompt for entry of the output file comment as specified in section 4.3.2.5 of this appendix. Upon confirmation, the ELD must generate the compliant output file and perform the data transfer.

(c) The supported single-step data transfer initiation mechanism (such as a switch or an icon on a touch-screen display) must be clearly marked and visible to the driver when the vehicle is stopped.

4.3.2.5. Driver's Entry of an Output File Comment

An ELD must accommodate the entry of an output file comment up to 60 characters long. If an authorized safety official provides a key phrase or code during an inspection to be included in the output file comment, it must be entered and embedded in the electronic ELD records in the exchanged dataset as specified in section 4.8.2.1.1 of this appendix. The default value for the output file comment must be blank. This output file comment must be used only for the creation of the related data files for the intended time, place, and ELD user.

4.3.2.6. Driver's Annotation of Records

(a) An ELD must allow a driver to add annotations in text format to recorded, entered, or edited ELD events.

(b) The ELD must require annotations to be 4 characters or longer, including embedded spaces if driver annotation is required and driver is prompted by the ELD.

4.3.2.7. Driver's Entry of Location Information

(a) An ELD must allow manual entry of a CMV's location by the driver in text format in support of the driver edit requirements described in section 4.3.2.8 of this appendix.

(b) The driver's manual location entry must be available as an option to a driver only when prompted by the ELD under allowed conditions as described in section 4.6.1.4 of this appendix.

(c) A manual location entry must show ''M'' in the latitude/longitude coordinates fields in ELD records.

4.3.2.8. Driver's Record Entry/Edit

(a) An ELD must provide a mechanism for a driver to review, edit, and annotate the driver's ELD records when a notation of errors or omissions is necessary or enter the driver's missing ELD records subject to the requirements specified in this section.

(b) An ELD must not permit alteration or erasure of the original information collected concerning the driver's ELD records or alteration of the source data streams used to provide that information.

4.3.2.8.1. Mechanism for Driver Edits and Annotations

(a) If a driver edits or annotates an ELD record or enters missing information, the act must not overwrite the original record.

(b) The ELD must use the process outlined in section 4.4.4.2 of this appendix to configure required event attributes to track the edit history of records.

(c) Driver edits must be accompanied by an annotation. The ELD must prompt the driver to annotate edits.

4.3.2.8.2. Driver Edit Limitations

(a) An ELD must not allow or require the editing or manual entry of records with the following event types, as described in section 7.25 of this appendix:

Event type	Description
2	An intermediate log,
5	A driver's login/logout activity,
6	CMV's engine power up/shut down, or
7	ELD malfunctions and data diagnostic events.

(b) An ELD must not allow automatically recorded driving time to be shortened or the ELD username associated with an ELD record to be edited or reassigned, except under the following circumstances:

(1) *Assignment of Unidentified Driver records.* ELD events recorded under the ''Unidentified Driver'' profile may be edited and assigned to the driver associated with the record; and

(2) *Correction of errors with team drivers.* In the case of team drivers, the driver account associated with the driving time records may be edited and reassigned between the team drivers if there was a mistake resulting in a mismatch between the actual driver and the driver recorded by the ELD and if both team drivers were respectively indicated in each other's records as a co-driver. The ELD must require each co-driver to confirm the change for the corrective action to take effect.

4.3.3. Motor Carrier's Manual Entries

An ELD must restrict availability of motor carrier entries outlined in this section only to authenticated ''support personnel'' account holders.

4.3.3.1. ELD Configuration

If an ELD or a technology that includes an ELD function offers configuration options to the motor carrier or the driver that are not otherwise addressed or prohibited in this appendix, the configuration options must not affect the ELD's compliance with the requirements of this rule for each configuration setting of the ELD.

4.3.3.1.1. Configuration of Available Categories Impacting Driving Time Recording

(a) An ELD must allow a motor carrier to unilaterally configure the availability of each of the three categories listed on Table 2 of this appendix that the motor carrier chooses to authorize for each of its drivers. By default, none of these categories must be available to a new driver account without the motor carrier proactively configuring their availability.

(b) A motor carrier may change the configuration for the availability of each category for each of its drivers. Changes to the configuration setting must be recorded on the ELD and communicated to the applicable authenticated driver during the ELD login process.

4.3.3.1.2. Configuration of Using ELDs

(a) An ELD must provide the motor carrier the ability to configure a driver account exempt from use of an ELD.

(b) The ELD must default the setting of this configuration option for each new driver account created on an ELD to ''no exemption.''

(c) An exemption must be proactively configured for an applicable driver account by the motor carrier. The ELD must prompt the motor carrier to annotate the record and provide an explanation for the configuration of exemption.

(d) If a motor carrier configures a driver account as exempt

(1) The ELD must present the configured indication that is in effect for that driver during the ELD login and logout processes.

(2) The ELD must continue to record ELD driving time but suspend detection of missing data elements data diagnostic event for the driver described in section 4.6.1.5 of this appendix and data transfer compliance monitoring function described in section 4.6.1.7 when such driver is authenticated on the ELD.

4.3.3.1.3 Motor Carrier's Post-Review Electronic Edit Requests

(a) An ELD may allow the motor carrier (via a monitoring algorithm or support personnel) to screen, review, and request corrective edits to the driver's certified (as described in section 4.3.2.3 of this appendix) and submitted records through the ELD system electronically. If this function is implemented by the ELD, the ELD must also support functions for the driver to see and review the requested edits.

(b) Edits requested by anyone or any system other than the driver must require the driver's electronic confirmation or rejection.

4.4. ELD Processing and Calculations

4.4.1. Conditions for Automatic Setting of Duty Status

4.4.1.1. Automatic Setting of Duty Status to Driving

An ELD must automatically record driving time when the vehicle is in motion by setting duty status to driving for the driver unless, before the vehicle is in motion, the driver:

(a) Sets the duty status to off-duty and indicates personal use of CMV, in which case duty status must remain off-duty until driver's indication of the driving condition ends; or

(b) Sets the duty status to on-duty not driving and indicates yard moves, in which case duty status must remain on-duty not driving until driver's indication of the driving condition ends.

4.4.1.2. Automatic Setting of Duty Status to On-Duty Not Driving

When the duty status is set to driving, and the CMV has not been in-motion for 5 consecutive minutes, the ELD must prompt the driver to confirm continued driving status or enter the proper duty status. If the driver does not respond to the ELD prompt within 1-minute after receiving the prompt, the ELD must automatically switch the duty status to on-duty not driving. The time thresholds for purposes of this section must not be configurable.

4.4.1.3. Other Automatic Duty-Status Setting Actions Prohibited

An ELD must not feature any other automatic records of duty setting mechanism than those described in sections 4.4.1.1 and 4.4.1.2 of this appendix. Duty status changes that are not initiated by the driver, including duty status alteration recommendations by motor carrier support personnel or a software algorithm, are subject to motor carrier edit requirements in section 4.3.3.1.3.

4.4.2. Geo-Location Conversions

(a) For each change in duty status, the ELD must convert automatically captured vehicle position in latitude/longitude coordinates into geo-location information, indicating approximate distance and direction to an identifiable location corresponding to the name of a nearby city, town, or village, with a State abbreviation.

(b) Geo-location information must be derived from a database that contains all cities, towns, and villages with a population of 5,000 or greater and listed in ANSI INCITS 446–2008 (R2013) (incorporated by reference, see § 395.38).

(c) An ELD's viewable outputs (such as printouts or display) must feature geo-location information as place names in text format.

4.4.3. Date and Time Conversions

(a) An ELD must have the capability to convert and track date and time captured in UTC standard to the time standard in effect at driver's home terminal, taking the daylight savings time changes into account by using the parameter ''Time Zone Offset from UTC'' as specified in section 7.41 of this appendix.

(b) An ELD must record the driver's record of duty status using the time standard in effect at the driver's home terminal for a 24-hour period beginning with the time specified by the motor carrier for that driver's home terminal.

(c) The data element ''Time Zone Offset from UTC'' must be included in the ''Driver's Certification of Own Records'' events as specified in section 4.5.1.4 of this appendix.

4.4.4. Setting of Event Parameters in Records, Edits, and Entries

This section describes the security measures for configuring and tracking event

attributes for ELD records, edits, and entries in a standardized manner.

4.4.4.1. Event Sequence Identifier (ID) Number

(a) Each ELD event must feature an event sequence ID number.

(1) The event sequence ID number for each ELD event must use continuous numbering across all users of that ELD and across engine and ELD power on and off cycles.

(2) An ELD must use the next available event sequence ID number (incremented by one) each time a new event log is recorded.

(3) The event sequence ID number must track at least the last 65,536 unique events recorded on the ELD.

(b) The continuous event sequence ID numbering structure used by the ELD must be mapped into a continuous hexadecimal number between 0000 (Decimal 0) and FFFF (Decimal 65535).

4.4.4.2. Event Record Status, Event Record Origin, Event Type Setting

(a) An ELD must retain the original records even when allowed edits and entries are made over a driver's ELD records.

(b) An ELD must keep track of all event record history, and the process used by the ELD must produce the event record status, event record origin, and event type for the ELD records in the standard categories specified in sections 7.23, 7.22, and 7.25 of this appendix, respectively for each record as a standard security measure. For example, an ELD may use the process outlined in sections 4.4.4.2.1–4.4.4.2.6 to meet the requirements of this section.

4.4.4.2.1. Records Automatically Logged by ELD

At the instance an ELD creates a record automatically, the ELD must:

(a) Set the ''Event Record Status'' to ''1'' (active); and

(b) Set the ''Event Record Origin'' to ''1'' (automatically recorded by ELD).

4.4.4.2.2. Driver Edits

At the instance of a driver editing existing record(s), the ELD must:

(a) Identify the ELD record(s) being modified for which the ''Event Record Status'' is currently set to ''1'' (active);

(b) Acquire driver input for the intended edit and construct the ELD record(s) that will replace the record(s) identified in paragraph 4.4.4.2.2(a) of this appendix;

(c) Set the ''Event Record Status'' of the ELD record(s) identified in paragraph 4.4.4.2.2(a) of this appendix, which is being modified, to ''2'' (inactive-changed);

(d) Set the ''Event Record Status'' of the ELD record(s) constructed in paragraph 4.4.4.2.2(b) of this appendix to ''1'' (active); and

(e) Set the ''Event Record Origin'' of the ELD record(s) constructed in paragraph 4.4.4.2.2(b) of this appendix to ''2'' (edited or entered by the driver).

4.4.4.2.3. Driver Entries

When a driver enters missing record(s), the ELD must:

(a) Acquire driver input for the missing entries being implemented and construct the new ELD record(s) that will represent the driver entries;

(b) Set the ''event record status'' of the ELD record(s) constructed in paragraph 4.4.4.2.3(a) of this appendix to ''1'' (active); and

(c) Set the ''event record origin'' of the ELD record(s) constructed in paragraph 4.4.4.2.3(a) of this appendix to ''2'' (edited or entered by the driver).

4.4.4.2.4. Driver's Assumption of Unidentified Driver Logs

When a driver reviews and assumes ELD record(s) logged under the unidentified driver profile, the ELD must:

(a) Identify the ELD record(s) logged under the unidentified driver profile that will be reassigned to the driver;

(b) Use elements of the unidentified driver log(s) from paragraph 4.4.4.2.4(a) of this appendix and acquire driver input to populate missing elements of the log originally recorded under the unidentified driver profile, and construct the new event record(s) for the driver;

(c) Set the event record status of the ELD record(s) identified in paragraph 4.4.4.2.4(a) of this appendix, which is being modified, to ''2'' (inactive–changed);

(d) Set the event record status of the ELD record(s) constructed in paragraph 4.4.4.2.4(b) of this appendix to ''1'' (active); and

(e) Set the event record origin of the ELD record(s) constructed in paragraph 4.4.4.2.4(b) of this appendix to ''4'' (assumed from unidentified driver profile).

4.4.4.2.5. Motor Carrier Edit Suggestions

If a motor carrier requests an edit on a driver's records electronically, the ELD must:

(a) Identify the ELD record(s) the motor carrier requests to be modified for which the ''event record status'' is currently set to ''1'' (active);

(b) Acquire motor carrier input for the intended edit and construct the ELD record(s) that will replace the record identified in paragraph 4.4.4.2.5(a) of this appendix—if approved by the driver;

(c) Set the event record status of the ELD record(s) in paragraph 4.4.4.2.5(b) of this appendix to ''3'' (inactive–change requested); and

(d) Set the event record origin of the ELD record constructed in paragraph 4.4.4.2.5(b) of this appendix to ''3'' (edit requested by an authenticated user other than the driver).

4.4.4.2.6. Driver's Actions Over Motor Carrier Edit Suggestions

(a) If edits are requested by the motor carrier, the ELD must allow the driver to review the requested edits and indicate on the ELD whether the driver confirms or rejects the requested edit(s).

(b) If the driver approves the motor carrier's edit suggestion the ELD must:

(1) Set the event record status of the ELD record(s) identified under paragraph 4.4.4.2.5 (a) of this appendix being modified, to ''2'' (inactive–changed); and

(2) Set the ''event record status'' of the ELD record(s) constructed in paragraph 4.4.4.2.5 (b) of this appendix to ''1'' (active).

(c) If the driver disapproves the motor carrier's edit(s) suggestion, the ELD must set the ''event record status'' of the ELD record(s) identified in paragraph 4.4.4.2.5 (b) of this appendix to ''4'' (inactive–change rejected).

4.4.5. Data Integrity Check Functions

(a) An ELD must support standard security measures that require the calculation and recording of standard data check values for each ELD event recorded, for each line of the output file, and for the entire data file to be generated for transmission to an authorized safety official or the motor carrier.

(b) For purposes of implementing data check calculations, the alphanumeric-to-numeric mapping provided in Table 3 of this appendix must be used.

(c) Each ELD event record type specified in sections 4.5.1.1 and 4.5.1.3 of this appendix must include an event data check value, which must be calculated as specified in section 4.4.5.1. An event data check value must be calculated at the time of the following instances and must accompany that event record thereafter:

(1) When an event record is automatically created by the ELD;

(2) When an authorized edit is performed by the driver on the ELD;

(3) When an electronic edit proposal is created by the motor carrier through the ELD system.

(d) Each line of the ELD output file must include a line data check value, which must be calculated as specified in section 4.4.5.2 of this appendix.

(e) Each ELD report must also include a file data check value, which must be calculated as specified in section 4.4.5.3 of this appendix.

4.4.5.1. Event Data Check

The event data check value must be calculated as follows.

4.4.5.1.1. Event Checksum Calculation

(a) A checksum calculation includes the summation of numeric values or mappings of a specified group of alphanumeric data elements. The ELD must calculate an event checksum value associated with each ELD event at the instance of the event record being created.

(b) The event record elements that must be included in the checksum calculation are the following:

(1) <Event Type>,
(2) <Event Code>,
(3) <Event Date>,
(4) <Event Time>,
(5) <Vehicle Miles>,
(6) <Engine Hours>,
(7) <Event Latitude>,
(8) <Event Longitude>,
(9) <CMV number>, and
(10) <ELD username>.

(c) The ELD must sum the numeric values of all individual characters making up the listed data elements using the character to decimal value coding specified in Table 3 of this appendix, and use the 8-bit lower byte of the hexadecimal representation of the summed total as the event checksum value for that event.

4.4.5.1.2. Event Data Check Calculation

The event data check value must be the hexadecimal representation of the output 8-bit byte, after the below bitwise operations

are performed on the binary representation of the event checksum value, as set forth below:

(a) Three consecutive circular shift left (rotate no carry -left) operations; and

(b) A bitwise exclusive OR (XOR) operation with the hexadecimal value C3 (decimal 195; binary 11000011).

4.4.5.2. Line Data Check

A line data check value must be calculated at the time of the generation of the ELD output file, to transfer data to authorized safety officials or to catalogue drivers' ELD records at a motor carrier's facility. A line data check value must be calculated as follows.

4.4.5.2.1. Line Checksum Calculation

(a) The ELD must calculate a line checksum value associated with each line of ELD output file at the instance when an ELD output file is generated.

(b) The data elements that must be included in the line checksum calculation vary as per the output data file specified in section 4.8.2.1 of this appendix.

(c) The ELD must convert each character featured in a line of output using the character to decimal value coding specified on Table 3 of this appendix and sum the converted numeric values of each character listed on a given ELD output line item (excluding the line data check value being calculated), and use the 8-bit lower byte value of the hexadecimal representation of the summed total as the line checksum value for that line of output.

4.4.5.2.2. Line Data Check Calculation

The line data check value must be calculated by performing the following operations on the binary representation of the line checksum value as follows:

(a) Three consecutive circular shift left (rotate no carry -left) operations on the line checksum value; and

(b) A bitwise XOR operation with the hexadecimal value 96 (decimal 150; binary 10010110).

4.4.5.2.3. Line Data Check Value Inclusion in Output File

The calculated line data check value must be appended as the last line item of each of the individual line items of the ELD output file as specified in the output file format in section 4.8.2.1 of this appendix.

4.4.5.3. File Data Check

A file data check value must also be calculated at the time of the creation of an ELD output file. A file data check value must be calculated as follows.

4.4.5.3.1. File Checksum Calculation

(a) The ELD must calculate a single 16-bit file checksum value associated with an ELD output file at the instance when an ELD output file is generated.

(b) The file data check value calculation must include all individual line data check values contained in that file.

(c) The ELD must sum all individual line data check values contained in a data file output created, and use the lower two 8-bit byte values of the hexadecimal representation of the summed total as the ''file checksum'' value.

4.4.5.3.2. File Data Check Value Calculation

(a) The file data check value must be calculated by performing the following operations on the binary representation of the file checksum value:

(1) Three consecutive circular shift left (aka rotate no carry -left) operations on each 8-bit bytes of the value; and

(2) A bitwise XOR operation with the hexadecimal value 969C (decimal 38556; binary 1001011010011100).

(b) The file data check value must be the 16-bit output obtained from the above process.

4.4.5.3.3. File Data Check Value Inclusion in Output File

The calculated 16-bit file data check value must be converted to hexadecimal 8-bit bytes and must be appended as the last line item of the ELD output file as specified in the output file format in section 4.8.2.1.11 of this appendix.

Table 3

Character to Decimal Value Mapping for Checksum Calculations

"Character" ➔ Decimal mapping {ASCII ("Character") (*decimal*)– 48 (*decimal*)}

"1"➔1	"A"➔17	"J"➔26	"S"➔35	"a"➔49	"j"➔58
"s"➔67					
"2"➔2	"B"➔18	"K"➔27	"T"➔36	"b"➔50	"k"➔59
"t"➔68					
"3"➔3	"C"➔19	"L"➔28	"U"➔37	"c"➔51	"l"➔60
"u"➔69					
"4"➔4	"D"➔20	"M"➔29	"V"➔38	"d"➔52	"m"➔61
"v"➔70					
"5"➔5	"E"➔21	"N"➔30	"W"➔39	"e"➔53	"n"➔62
"w"➔71					
"6"➔6	"F"➔22	"O"➔31	"X"➔40	"f"➔54	"o"➔63
"x"➔72					
"7"➔7	"G"➔23	"P"➔32	"Y"➔41	"g"➔55	"p"➔64
"y"➔73					
"8"➔8	"H"➔24	"Q"➔33	"Z"➔42	"h"➔56	"q"➔65
"z"➔74					
"9"➔9	"I"➔25	"R"➔34		"i"➔57	"r"➔66
All other characters including blank spaces➔ 0					

4.5. ELD Recording

4.5.1. Events and Data To Record

An ELD must record data at the following discrete events:

4.5.1.1. Event: Change in Driver's Duty Status

When a driver's duty status changes, the ELD must associate the record with the driver, the record originator—if created during an edit or entry—the vehicle, the motor carrier, and the shipping document number and must include the following data elements:

(a) <Event Sequence ID Number> as described in section 7.24 of this appendix;

(b) <Event Record Status> as described in section 7.23;

(c) <Event Record> Origin as described in section 7.22;

(d) <Event Type> as described in section 7.25;

(e) <Event Code as described in section 7.20;

(f) <{*Event*} Date> as described in section 7.8;

(g) <{*Event*} Time> as described in section 7.40;

(h) <{*Accumulated*} Vehicle Miles> as described in section 7.43;

(i) <{*Elapsed*}> Engine Hours as described in section 7.19;

(j) <{*Event*}> Latitude as described in section 7.31;

(k) <{*Event*}> Longitude as described in section 7.33;

(l) <Distance Since Last Valid Coordinates> as described in section 7.9;

(m) <Malfunction Indicator Status {*for ELD*}> as described in section 7.35;

(n) <Data Diagnostic Event Indicator Status {*for Driver*}> as described in section 7.7;

(o) <{*Event*}> Comment/Annotation as described in section 7.6;

(p) <Driver's Location Description> as described in section 7.12; and

(q) <Event Data Check Value> as described in section 7.21.

4.5.1.2. Event: Intermediate Logs

(a) When a CMV is in motion, as described in section 4.3.1.2 of this appendix, and there has not been a duty status change event or another intermediate log event recorded in the previous 1-hour period, the ELD must record a new intermediate log event.

(b) The ELD must associate the record to the driver, the vehicle, the motor carrier, and the shipping document number, and must include the same data elements outlined in section 4.5.1.1 of this appendix except for item (p) in section 4.5.1.1.

4.5.1.3. Event: Change in Driver's Indication of Allowed Conditions That Impact Driving Time Recording

(a) At each instance when the status of a driver's indication of personal use of CMV or yard moves changes, the ELD must record a new event.

(b) The ELD must associate the record with the driver, the vehicle, the motor carrier, and the shipping document number, and must include the same data elements outlined in section 4.5.1.1 of this appendix.

4.5.1.4. Event: Driver's Certification of Own Records

(a) At each instance when a driver certifies or re-certifies that the driver's records for a given 24-hour period are true and correct, the ELD must record the event.

(b) The ELD must associate the record with the driver, the vehicle, the motor carrier, and the shipping document number and must include the following data elements:

(1)<Event Sequence ID Number> as described in section 7.24 of this appendix;

(2)<Event Type> as described in section 7.25;

(3)<Event Code> as described in section 7.20;

(4)<Time Zone Offset from UTC> as described in section 7.41.

(5) <{*Event*} Date> and <Date {of the certified record}> as described in section 7.8; and

(6) <{*Event*} Time> as described in section 7.40.

4.5.1.5. Event: Driver's Login/Logout Activity

(a) At each instance when an authorized user logs in and out of the ELD, the ELD must record the event.

(b) The ELD must associate the record with the driver, the vehicle, the motor carrier, and the shipping document number, and must include the following data elements:

(1) <Event Sequence ID Number> as described in section 7.24 of this appendix;

(2) <Event Type> as described in section 7.25;

(3) <Event Code> as described in section 7.20;

(4) <{*Event*} Date> as described in section 7.8;

(5) <{*Event*} Time> as described in section 7.40;

(6) <{*Total*} Vehicle Miles> as described in section 7.43; and

(7) <{*Total*} Engine Hours> as described in section 7.19.

4.5.1.6. Event: CMV's Engine Power Up and Shut Down Activity

(a) When a CMV's engine is powered up or shut down, an ELD must record the event within 1 minute of occurrence and retain the earliest shut down and latest power-up event if the CMV has not moved since the last ignition power on cycle.

(b) The ELD must associate the record with the driver or the unidentified driver profile, the vehicle, the motor carrier, and the shipping document number, and must include the following data elements:

(1) <Event Sequence ID Number> as described in section 7.24 of this appendix;

(2) <Event Type> as described in section 7.25;

(3) <Event Code> as described in section 7.20;

(4) <{*Event*} Date> as described in section 7.8;

(5) <{*Event*} Time> as described in section 7.40;

(6) <{*Total*} Vehicle Miles> as described in section 7.43;

(7) <{*Total*} Engine Hours> as described in section 7.19;

(8) <{*Event*} Latitude> as described in section 7.31;

(9) <{*Event*} Longitude> as described in section 7.33; and

(10) <Distance Since Last Valid Coordinates> as described in section 7.9.

4.5.1.7. Event: ELD Malfunction and Data Diagnostics Occurrence

(a) At each instance when an ELD malfunction or data diagnostic event is detected or cleared by the ELD, the ELD must record the event.

(b) The ELD must associate the record with the driver, the vehicle, the motor carrier, and the shipping document number, and must include the following data elements:

(1) <Event Sequence ID Number> as described in section 7.24 of this appendix;

(2) <Event Type> as described in section 7.25;

(3) <Event Code> as described in section 7.20;

(4) <Malfunction/Diagnostic Code> as described in section 7.34;

(5) <{*Event*} Date> as described in section 7.8;

(6) <{*Event*} Time> as described in section 7.40;

(7) <{*Total*} Vehicle Miles> as described in section 7.43; and

(8) <{*Total*} Engine Hours> as described in section 7.19.

4.6. ELD's Self-Monitoring of Required Functions

An ELD must have the capability to monitor its compliance with the technical requirements of this section for the detectable malfunctions and data inconsistencies listed in Table 4 of this appendix and must keep records of its malfunction and data diagnostic event detection.

Table 4

Standard Coding for Required Compliance Malfunction and Data Diagnostic Event Detection

Malfunction/Diagnostic Code	Malfunction Description
P	"Power compliance" malfunction
E	"Engine synchronization compliance" malfunction
T	"Timing compliance" malfunction
L	"Positioning compliance" malfunction
R	"Data recording compliance" malfunction
S	"Data transfer compliance" malfunction
O	"Other" ELD detected malfunction

Malfunction/Diagnostic Code	Data Diagnostic Event
1	"Power data diagnostic" event
2	"Engine synchronization data diagnostic" event
3	"Missing required data elements data diagnostic" event
4	"Data transfer data diagnostic" event
5	"Unidentified driving records data diagnostic" event
6	"Other" ELD identified diagnostic event

4.6.1. Compliance Self-Monitoring, Malfunctions and Data Diagnostic Events

4.6.1.1. Power Compliance Monitoring

(a) An ELD must monitor data it receives from the engine ECM or alternative sources as allowed in sections 4.3.1.1–4.3.1.4 of this appendix, its onboard sensors, and data record history to identify instances when it may not have complied with the power requirements specified in section 4.3.1.1, in which case, the ELD must record a power data diagnostics event for the corresponding driver(s), or under the unidentified driver profile if no drivers were authenticated at the time of detection.

(b) An ELD must set a power compliance malfunction if the power data diagnostics event described in paragraph 4.6.1.1(a) of this appendix indicates an aggregated in-motion driving time understatement of 30 minutes or more on the ELD over a 24-hour period across all driver profiles, including the unidentified driver profile.

4.6.1.2. Engine Synchronization Compliance Monitoring

(a) An ELD must monitor the data it receives from the engine ECM or alternative sources as allowed in sections 4.3.1.1–4.3.1.4 of this appendix, its onboard sensors, and data record history to identify instances and durations of its non-compliance with the ELD engine synchronization requirement specified in section 4.2.

(b) An ELD required to establish a link to the engine ECM as described in section 4.2 must monitor its connectivity to the engine ECM and its ability to retrieve the vehicle parameters described under section 4.3.1 of this appendix and must record an engine-synchronization data diagnostics event when it no longer can acquire updated values for the ELD parameters required for records within 5 seconds of the need.

(c) An ELD must set an engine synchronization compliance malfunction if connectivity to any of the required data sources specified in section 4.3.1 of this appendix is lost for more than 30 minutes during a 24-hour period aggregated across all driver profiles, including the unidentified driver profile.

4.6.1.3. Timing Compliance Monitoring

The ELD must periodically cross-check its compliance with the requirement specified in section 4.3.1.5 of this appendix with respect to an accurate external UTC source and must record a timing compliance malfunction when it can no longer meet the underlying compliance requirement.

4.6.1.4. Positioning Compliance Monitoring

(a) An ELD must continually monitor the availability of valid position measurements meeting the listed accuracy requirements in section 4.3.1.6 of this appendix and must track the distance and elapsed time from the last valid measurement point.

(b) ELD records requiring location information must use the last valid position measurement and include the latitude/longitude coordinates and distance traveled, in miles, since the last valid position measurement.

(c) An ELD must monitor elapsed time during periods when the ELD fails to acquire a valid position measurement within 5 miles of the CMV's movement. When such elapsed time exceeds a cumulative 60 minutes over a 24 hour period, the ELD must set and record a positioning compliance malfunction.

(d) If a new ELD event must be recorded at an instance when the ELD had failed to acquire a valid position measurement within the most recent elapsed 5 miles of driving, but the ELD has not yet set a positioning compliance malfunction, the ELD must record the character ''X'' in both the latitude and longitude fields, unless location is entered manually by the driver, in which case it must log the character ''M'' instead. Under the circumstances listed in this paragraph, if the ELD event is due to a change in duty status for the driver, the ELD must prompt the driver to enter location manually in accordance with section 4.3.2.7 of this appendix. If the driver does not enter the location information and the vehicle is in motion, the ELD must record a missing required data element data diagnostic event for the driver.

(e) If a new ELD event must be recorded at an instance when the ELD has set a positioning compliance malfunction, the ELD must record the character ''E'' in both the latitude and longitude fields regardless of whether the driver is prompted and manually enters location information.

4.6.1.5. Data Recording Compliance Monitoring

(a) An ELD must monitor its storage capacity and integrity and must detect a data recording compliance malfunction if it can no longer record or retain required events or

retrieve recorded logs that are not otherwise catalogued remotely by the motor carrier.

(b) An ELD must monitor the completeness of the ELD event record information in relation to the required data elements for each event type and must record a missing data elements data diagnostics event for the driver if any required field is missing at the time of recording.

4.6.1.6. Monitoring Records Logged Under the Unidentified Driver Profile

(a) When there are ELD records involving driving time logged on an ELD under the unidentified driver profile, the ELD must prompt the driver(s) logging in with a warning indicating the existence of new unassigned driving time.

(b) The ELD must provide a mechanism for the driver to review and either acknowledge the assignment of one or more of the unidentified driver records attributable to the driver under the authenticated driver's profile as described in paragraph 4.3.2.8.2(b)(1) of this appendix or indicate that these records are not attributable to the driver.

(c) If more than 30 minutes of driving in a 24-hour period show unidentified driver on the ELD, the ELD must detect and record an unidentified driving records data diagnostic event and the data diagnostic indicator must be turned on for all drivers logged in to that ELD for the current 24-hour period and the following 7 days.

(d) An unidentified driving records data diagnostic event can be cleared by the ELD when driving time logged under the unidentified driver profile for the current 24-hour period and the previous 7 consecutive days drops to 15 minutes or less.

4.6.1.7. Data Transfer Compliance Monitoring

(a) An ELD must implement in-service monitoring functions to verify that the data transfer mechanism(s) described in section 4.9.1 of this appendix are continuing to function properly. An ELD must verify this functionality at least once every 7 days. These monitoring functions may be automatic or may involve manual steps for a driver.

(b) If the monitoring mechanism fails to confirm proper in-service operation of the data transfer mechanism(s), an ELD must record a data transfer data diagnostic event and enter an unconfirmed data transfer mode.

(c) After an ELD records a data transfer data diagnostic event, the ELD must increase the frequency of the monitoring function to check at least once every 24-hour period. If the ELD stays in the unconfirmed data transfer mode following the next three consecutive monitoring checks, the ELD must detect a data transfer compliance malfunction.

4.6.1.8. Other Technology-Specific Operational Health Monitoring

In addition to the required monitoring schemes described in sections 4.6.1.1–4.6.1.7 of this appendix, the ELD provider may implement additional, technology-specific malfunction and data diagnostic detection schemes and may use the ELD's malfunction status indicator and data diagnostic status indicator (described in sections 4.6.2.1 and 4.6.3.1) to communicate the ELD's malfunction or non-compliant state to the operator(s) of the ELD.

4.6.2. ELD Malfunction Status Indicator

ELD malfunctions affect the integrity of the device and its compliance; therefore, active malfunctions must be indicated to all drivers who may use that ELD. An ELD must provide a recognizable visual indicator, and may provide an audible signal, to the operator as to its malfunction status.

4.6.2.1. Visual Malfunction Indicator

(a) An ELD must display a single visual malfunction indicator for all drivers using the ELD on the ELD's display or on a stand-alone indicator. The visual signal must be visible to the driver when the driver is seated in the normal driving position.

(b) The ELD malfunction indicator must be clearly illuminated when there is an active malfunction on the ELD.

(c) The malfunction status must be continuously communicated to the driver when the ELD is powered.

4.6.3. ELD Data Diagnostic Status Indicator

ELD data diagnostic status affects only the authenticated user; therefore, an ELD must only indicate the active data diagnostics status applicable to the driver logged into the ELD. An ELD must provide a recognizable visual indicator, and may provide an audible signal, to the driver as to its data diagnostics status.

4.6.3.1. Visual Data Diagnostics Indicator

(a) An ELD must display a single visual data diagnostics indicator, apart from the visual malfunction indicator described in section 4.6.2.1 of this appendix, to communicate visually the existence of active data diagnostics events for the applicable driver.

(b) The visual signal must be visible to the driver when the driver is seated in the normal driving position.

4.7. Special Purpose ELD Functions

4.7.1. Driver's ELD Volume Control

(a) If a driver selects the sleeper-berth state for the driver's record of duty status, and no co-driver has logged into the ELD as on-duty driving, and if the ELD outputs audible signals, the ELD must either:

(1) Allow the driver to mute the ELD's volume or turn off the ELD's audible output, or

(2) Automatically mute the ELD's volume or turn off the ELD's audible output.

(b) For purposes of this section, if an ELD operates in combination with another device or other hardware or software technology that is not separate from the ELD, the volume controls required herein apply to the combined device or technology.

4.7.2. Driver's Access to Own ELD Records

(a) An ELD must provide a mechanism for a driver to obtain a copy of the driver's own ELD records on demand, in either an electronic or printout format compliant with inspection standards outlined in section 4.8.2.1 of this appendix.

(b) The process must not require a driver to go through the motor carrier to obtain copies of the driver's own ELD records if driver's records reside on or are accessible directly by the ELD unit used by the driver.

(c) If an ELD meets the requirements of this section by making data files available to the driver, it must also provide a utility function for the driver to display the data on a computer, at a minimum, as specified in § 395.8(g).

4.7.3. Privacy Preserving Provision for Use During Personal Uses of a CMV

(a) An ELD must record the events listed in section 4.5.1 of this appendix under all circumstances. However, when a driver indicates that the driver is temporarily using the CMV for an authorized personal purpose, a subset of the recorded elements must either be omitted in the records or recorded at a lower precision level, as described in further detail below. The driver indicates this intent by setting the driver's duty status to off-duty, as described in section 4.3.2.2.1, and indicating authorized personal use of CMV as described in section 4.3.2.2.2.

(b) During a period when a driver indicates authorized personal use of CMV, the ELD must:

(1) Record all new ELD events with latitude/longitude coordinates information rounded to a single decimal place resolution; and

(2) Omit recording vehicle miles and engine hours fields in new ELD logs by leaving them blank, except for events corresponding to a CMV's engine power-up and shut-down activity as described in section 4.5.1.6 of this appendix.

(c) A driver's indication that the CMV is being operated for authorized personal purposes may span more than one CMV ignition on cycle if the driver proactively confirms continuation of the personal use condition prior to placing the vehicle in motion when the ELD prompts the driver at the beginning of the new ignition power on cycle.

4.8. ELD Outputs

4.8.1. Printout or Display

The ELD must be able to generate a compliant report as specified in this section, either as a printout or on a display.

4.8.1.1. Print Paper Requirements

Print paper must be able to accommodate the graph grid specifications as listed in section 4.8.1.3 of this appendix.

4.8.1.2. Display Requirements

(a) This section does not apply if an ELD produces a printout for use at a roadside inspection.

(b) An ELD must be designed so that its display may be reasonably viewed by an authorized safety official without entering the commercial motor vehicle. For example, the display may be untethered from its mount or connected in a manner that would allow it to be passed outside of the vehicle for a reasonable distance.

4.8.1.3. Information To Be Shown on the Printout and Display at Roadside

(a) The printout and display must show reports for the inspected driver's profile and the unidentified driver profile separately. If

there are no unidentified driver records existing on the ELD for the current 24-hour period and for any of the previous 7 consecutive days, an ELD does not need to print or display unidentified driver records for the authorized safety official. Otherwise, both reports must be printed or displayed and provided to the authorized safety official.

(b) The printout and display must show the following information for the current 24-hour period and each of the previous 7 consecutive days: (Items in < . > are data elements.)

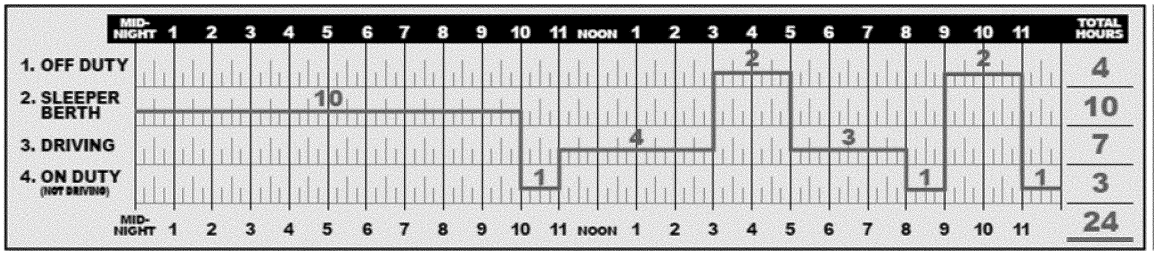
Date: <Date {*of Record*}>
24-hour Starting Time, Time Zone Offset from UTC: <24-Hour Period Starting Time>, <Time Zone Offset from UTC>
Carrier: <Carrier's USDOT number>,<Carrier Name>
Driver Name: <{*Driver*} Last Name>, <{*Driver*} First Name>
Driver ID < ELD username{*for the driver*} >
Driver License State <{*Driver*} Driver License Issuing State>
Driver License Number: <{Driver} Driver License Number>
Co-Driver: <{*Co-Driver's*} Last Name>, <{*Co-Driver's*} First Name>
Co-Driver ID: < ELD username{*for the co-driver*}>
Current Odometer: <{*Current*}{*Total*} Vehicle Miles>
Current Engine Hours: <{*Current*}{*Total*} Engine Hours>
ELD ID: <ELD Registration ID>
ELD Provider: <Provider>
Truck Tractor ID: <CMV Power Unit Number>
Truck Tractor VIN: <CMV VIN>
Shipping ID: <Shipping Document Number>
Current Location: <{*Current*} Geo-location>
Unidentified Driving Records: <{*Current*} Data Diagnostic Event Indicator Status {*for ''Unidentified driving records data diagnostic'' event*}>
Exempt Driver Status: <Exempt Driver Configuration {*for the Driver*}>
ELD Malfunction Indicators: <Malfunction Indicator Status {and Malfunction Description} {*for ELD*}>
Driver's Data Diagnostic Status: <Data Diagnostic Event Status {and Diagnostic Description}{*for Driver*}>
Date: <Date {*of Printout or Display*}>
Change of Duty Status, Intervening Interval Records and Change in Driver's Indication of Special Driving Conditions:
<Event Record Status>,<Event Record Origin>,<Event Type>,<{*Event*} Date>, <{*Event*} Time>,<{*Accumulated*} Vehicle Miles>,<{*Elapsed*} Engine Hours>,<Geo-Location>#,<{*Event*} Comment/Annotation>
<Event Sequence ID Number>,<Event Record Status>,<Event Record Origin>,<Event Type>,<Event Code>,<{*Event*} Date>,<{*Event*} Time>,<{*Accumulated*} Vehicle Miles>,<{*Elapsed*} Engine Hours>,<Geo-Location>#,<{*Event*} Comment/Annotation>
''<Geo-location> must be substituted with ''<Driver's Location Description>'' field for manual entries and with ''<{blank}>'' field for intervening logs.

Example of Print/Display Daily Header

Record Date	*USDOT #*	*Driver License Number*	*Driver License State*	*ELD ID*	*Trailer ID*
20-Nov-14	123456789	D000368210361	IL	987654	Unit #
Time Zone	*Driver Name*	*Co-Driver Name*	*ELD Manufacturer*	*Shipping ID*	*Data Diagnostic Indicators*
CST	Smith, Richard	Jones, David	Acme ELDs	BL1234567890	Yes
24-Period Starting Tim	*Driver ID*	*Co-Driver ID*	*Truck Tractor ID*	*Unidentified Driver Records*	*ELD Malfunction Indicators*
Midnight	1234567	8910111	Unit #	No	Yes
Carrier		*Start- End Odometer*	*Truck Tractor VIN*	*Exempt Driver Status*	*Start-End engine hours*
Acme Trucking		39564-40044	1M2P267Y5AM022445	No	758.2-766.7
Current Location		*File Comment*		*Print/Display Date*	
Truckee, CA				20-Nov-14	

24 Hours [Print/Display Graph Grid]
Total hours <Total Hours {in working day so far}>
Off duty <Total Hours {logged in Off-duty status}>
Sleeper Berth <Total Hours {logged in Sleeper berth status}>
Driving <Total Hours {logged in Driving status}>
On duty not driving <Total Hours {logged in on-duty not driving status}>
Miles Today <Vehicle Miles {Driven Today}>

Example of Print/Display 24 Hours Duty Status Grid



[For Each Row of Driver's Record Certification Events]
Time: <{Event} Time>
Location: <Geo-Location>#
Odometer: <{Total} Vehicle Miles>
Engine Hours: <{Total} Engine Hours>
Event: <Date {of the certified record}>
Origin: Driver
Comment: <{Event} Comment/Annotation>

[For Each Row of Malfunctions and Data Diagnostic Events]
Time: <{Event} Time>
Location: <Geo-Location>#
Odometer: <{Total}Vehicle Miles>
Engine Hours: <{Total}Engine Hours>
Event: <Event Type>
Origin: <Event Record Origin>
Comment: <{Event} Comment/Annotation>

[For Each Row of ELD Login/Logout Events]
Time: <{Event} Time>
Location: <Geo-Location>#
Odometer: <{Total}Vehicle Miles>
Engine Hours: <{Total}Engine Hours>
Event: <Event Type>
Origin: <ELD username>
Comment: <{Event} Comment/Annotation>

[For Each Row of CMV Engine Power up/Shut Down Events]
Time: <{Event} Time> (24 hours)

Location: <Geo-Location>#
Odometer: <{Total}Vehicle Miles>
Engine Hours: <{Total}Engine Hours>
Event: <Event Type>
Origin: Auto
Comment/Annotation>

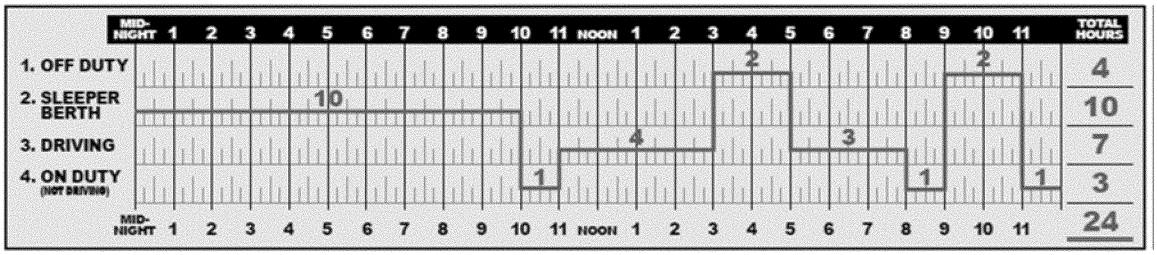
[1] Printout report must only list up to 10 most recent ELD malfunctions and up to 10 most recent data diagnostics events within the time period for which the report is generated.

Example of Print/Display detail log data

Time	Location	Odometer	Eng Hours	Event Type/Status	Origin
19-Nov-14					
22:00	49 mi NNE Fallon, NV	39564	758.2	Off duty	Driver
20-Nov-14					
10:00	49 mi NNE Fallon, NV	39564	758.2	Login	Driver
10:00	49 mi NNE Fallon, NV	39564	758.2	ODND	Driver
11:52	49 mi NNE Fallon, NV	39564	758.2	PowerUp	Auto
11:52	49 mi NNE Fallon, NV	39564	758.2	Power Compliance	Auto
11:52	49 mi NNE Fallon, NV	39564	758.2	Engine Sync	Auto
12:00	49 mi NNE Fallon, NV	39564	758.3	Driving	Driver
13:00	2 mi E Fernley, NV	39624	759.3	Int Location	Auto
14:00	7 mi NNE Truckee, CA	39684	760.3	Int Location	Auto
15:00	6 mi SSE Meadow Vista, CA	39744	761.3	Int Location	Auto
16:00	3.5 mi SW Davis, CA	39804	762.3	Off duty	Driver
16:45	3.5 mi SW Davis, CA	39804	762.3	On duty	Driver
17:00	3.5 mi SW Davis, CA	39804	762.4	Driving	Auto

Example of Full Day ELD Record:

Record Date	*USDOT #*	*Driver License Number*	*Driver License State*	*ELD ID*	*Trailer ID*
20-Nov-14	123456789	D000368210361	IL	987654	Unit #
Time Zone	*Driver Name*	*Co-Driver Name*	*ELD Manufacturer*	*Shipping ID*	*Data Diagnostic Indicators*
CST	Smith, Richard		Acme ELDs	BL1234567890	No
24 Period Starting Time	*Driver ID*	*Co-Driver ID*	*Truck Tractor ID*	*Unidentified Driver Records*	*ELD Malfunction Indicators*
Midnight	1234567		Unit #	No	No
Carrier	*Start End Odometer*	*Miles Today*	*Truck Tractor VIN*	*Exempt Driver Status*	*Start End Engine Hours*
Acme Trucking	39564 - 39984	420	1M2P267Y5AM022445	No	758.2-765.7
Current Location		*File Comment*		*Print/Display Date*	
6 mi. NE North Auburn, CA				20-Nov-14	



Time	Location	Odometer	Eng Hours	Event Type/Status	Origin
20-Nov-14					
0:00	49 mi NNE Fallon, NV	39564	758.2	SB	Driver
10:00	49 mi NNE Fallon, NV	39564	758.2	Login	Driver
10:00	49 mi NNE Fallon, NV	39564	758.2	ODND	Driver
10:52	49 mi NNE Fallon, NV	39564	758.2	Power Up	Auto
11:00	49 mi NNE Fallon, NV	39564	758.2	Driving	Auto
12:00	2 mi E Fernley, NV	39624	759.3	Int Location	Auto
13:00	7 mi NNE Truckee, CA	39684	760.3	Int Location	Auto
14:00	6 mi SSE Meadow Vista, CA	39744	761.3	Int Location	Auto
15:00	3.5 mi SW Davis, CA	39804	762.3	Off Duty	Driver
17:00	3.5 mi SW Davis, CA	39804	762.3	Driving	Auto
18:00	1 mi E Emeryville, CA	39864	763.4	Int Location	Auto
19:00	4 mi SSW Univ. of California, CA	39924	764.4	Int Location	Auto
20:00	6 mi NE North Auburn, CA	39984	765.5	ODND	Driver
21:00	6 mi NE North Auburn, CA	39984	765.7	Off Duty	Driver
23:00	6 mi NE North Auburn, CA	39984	765.7	ODND	Driver
23:58	6 mi NE North Auburn, CA	39984	765.7	Cert	Driver
23:58	6 mi NE North Auburn, CA	39984	765.7	Logout	Driver

(c) The printout and display must show a graph-grid consistent with § 395.8(g) showing each change of duty status.

(1) On the printout, the graph-grid for each day's RODS must be at least 6 inches by 1.5 inches in size.

(2) The graph-grid must overlay periods of driver's indications of authorized personal use of CMV and yard moves using a different style line (such as dashed or dotted line) or shading. The appropriate abbreviation must also be indicated on the graph-grid.

4.8.2. ELD Data File

An ELD must have the capability to generate a consistent electronic file output compliant with the format described herein to facilitate the transfer, processing, and standardized display of ELD data sets on the authorized safety officials' computing environments.

4.8.2.1. ELD Output File Standard

(a) Regardless of the particular database architecture used for recording the ELD events in electronic format, the ELD must produce a standard ELD data output file for transfer purposes, which must be generated according to the standard specified in this section.

(b) Data output must be provided in a single comma-delimited file outlined in this section using American National Standard Code for Information Exchange (ASCII) character sets meeting the standards of ANSI INCITS 4–1986 (R2012) (incorporated by reference, see § 395.38). It must include:

(1) A header segment, which specifies current or non-varying elements of an ELD file; and

(2) Variable length comma-delimited segments for the drivers, vehicles, ELD events, ELD malfunction and data diagnostics records, ELD login and logout activity, and unidentified driver records.

(3) Any field value that may contain a comma (‘‘,’’) or a carriage return (<CR>) must be replaced with a semicolon (‘;’) before generating the compliant CSV output file.

4.8.2.1.1. Header Segment

This segment must include the following data elements and format:

ELD File Header Segment: <CR>

<{*Driver's*} Last Name>,<{*Driver's*} First Name>,< ELD username{*for the driver*}>,< {*Driver's*} Driver's License Issuing State>,<{*Driver's*} Driver's License Number>,<Line Data Check Value> <CR>

<{Co-Driver's} Last Name>,<{Co-Driver's} First Name>,<ELD username {*for the co-driver*} >,<Line Data Check Value> <CR>

<CMV Power Unit Number>,<CMV VIN>,<Trailer Number(s)>,<Line Data Check Value> <CR>

<Carrier's USDOT Number>,<Carrier Name>,<Multiday-basis Used>,<24-Hour Period Starting Time>,<Time Zone Offset from UTC>,<Line Data Check Value> <CR><Shipping Document Number>,<Exempt Driver Configuration>,<Line Data Check Value> <CR>

<{*Current*} Date,< {*Current*} Time>, < {*Current*} Latitude>,<{*Current*} Longitude,< {*Current*} {*Total*} Vehicle Miles,< {*Current*} {*Total*} Engine Hours>,<Line Data Check Value> <CR>

<ELD Registration ID>,<ELD Identifier>, <ELD Authentication Value>,<Output File Comment>,<Line Data Check Value> <CR>

4.8.2.1.2. User List

This segment must list all drivers and co-drivers with driving time records on the most recent CMV operated by the inspected driver and motor carrier's support personnel who requested edits within the time period for which this file is generated. The list must be in chronological order with most recent user of the ELD on top, and include the driver being inspected, the co-driver, and the unidentified driver profile. This segment has a variable number of rows depending on the number of profiles with activity over the time period for which this file is generated. This section must start with the following title:

User List: <CR>

Each subsequent row must have the following data elements:

<{*Assigned User*} Order Number>,<{*User's*} ELD Account Type,<{*User's*} Last Name>,<{*User's*} First Name>,<Line Data Check Value> <CR>

4.8.2.1.3. CMV List

This segment must list each CMV that the current driver operated and that has been recorded on the driver's ELD records within the time period for which this file is generated. The list must be rank ordered in accordance with the time of CMV operation with the most recent CMV being on top. This segment has a variable number of rows depending on the number of CMVs operated by the driver over the time period for which this file is generated. This section must start with the following title:

CMV List: <CR>

Each subsequent row must have the following data elements:

<{*Assigned CMV*} Order Number>,<CMV Power Unit Number>,<CMV VIN>,<Line Data Check Value> <CR>

4.8.2.1.4. ELD Event List for Driver's Record of Duty Status

This segment must list ELD event records tagged with event types 1 (a change in duty status as described in section 4.5.1.1 of this appendix), 2 (an intermediate log as described in section 4.5.1.2), and 3 (a change in driver's indication of conditions impacting driving time recording as described in section 4.5.1.3). The segment must list all event record status types and all event record origins for the driver, rank ordered with the most current log on top in accordance with the date and time fields of the record. This segment has a variable number of rows depending on the number of ELD events recorded for the driver over the time period for which this file is generated. This section must start with the following title:

ELD Event List: <CR>

Each subsequent row must have the following data elements:

<Event Sequence ID Number>,<Event Record Status>,<Event Record Origin>,<Event Type>, <Event Code>,<{*Event*} Date>,<{*Event*}Time>,<{*Accumulated*} Vehicle Miles>,<{*Elapsed*} Engine Hours>, {*Event*} <Latitude>,<{*Event*}Longitude>,<Distance Since Last Valid Coordinates>, <{*Corresponding CMV*} Order Number>,<{*User*} Order Number {*for Record Originator*}>,<Malfunction Indicator Status {*for ELD*}>,<Data Diagnostic Event Indicator Status {*for Driver*}>,<Event Data Check Value>,<Line Data Check Value> <CR>

4.8.2.1.5. Event Annotations, Comments, and Driver's Location Description

This segment must list only the elements of the ELD event list created in section 4.8.2.1.4 of this appendix that have an annotation, comment, or a manual entry of location description by the driver. This segment has a variable number of rows depending on the number of ELD events under section 4.8.2.1.4 that feature a comment, annotation, or manual location entry by the driver. This section must start with the following title:

ELD Event Annotations or Comments: <CR>

Each subsequent row must have the following data elements:

<Event Sequence ID Number>,<ELD username {*of the Record Originator*}>,<{*Event*} Comment Text or Annotation>,<{Event} Date>,<{Event} Time>, <Driver's Location Description>,<Line Data Check Value> <CR>

4.8.2.1.6. ELD Event List for Driver's Certification of Own Records

This segment must list ELD event records with event type 4 (driver's certification of own records as described in section 4.5.1.4 of this appendix) for the inspected driver for the time period for which this file is generated. It must be rank ordered with the most current record on top. This segment has a variable number of rows depending on the number of certification and re-certification actions the authenticated driver may have executed on the ELD over the time period for which this file is generated. This section must start with the following title:

Driver's Certification/Recertification Actions: <CR>

Each subsequent row must have the following data elements:

<Event Sequence ID Number>,<Event Code>, <{*Event*} Date>,<{*Event*} Time>,<Date {*of the certified record*}>,<{*Corresponding CMV*} Order Number>,<Line Data Check Value> <CR>

4.8.2.1.7. Malfunction and Diagnostic Event Records

This segment must list all malfunctions that have occurred on this ELD during the time period for which this file is generated. It must list diagnostic event records related to the driver being inspected, rank ordered with the most current record on top. This segment has a variable number of rows depending on the number of ELD malfunctions and ELD diagnostic event records recorded and relevant to the inspected driver over the time period for which this file is generated. This section must start with the following title:

Malfunctions and Data Diagnostic Events: <CR>

Each subsequent row must have the following data elements:

<Event Sequence ID Number>,<Event Code>,<Malfunction/Diagnostic Code>,<{*Event*} Date>,<{*Event*} Time>,<{*Total*} Vehicle Miles>,<{*Total*} Engine Hours>, <{*Corresponding CMV*} Order Number>,<Line Data Check Value> <CR>

4.8.2.1.8. ELD Login/Logout Report

This segment must list the login and logout activity on the ELD (ELD events with event type 5 (A driver's login/logout activity)) for the inspected driver for the time period for which this file is generated. It must be rank ordered with the most recent activity on top. This section must start with the following title:

ELD Login/Logout Report: <CR>

Each subsequent row must have the following data elements:

<Event Sequence ID Number>,<Event Code>,<ELD username>,<{*Event*} Date>,<{*Event*} Time>,<{*Total*} Vehicle Miles>,<{*Total*} Engine Hours>,<Line Data Check Value> <CR>

4.8.2.1.9. CMV's Engine Power-Up and Shut Down Activity

This segment must list the logs created when a CMV's engine is powered up and shut down (ELD events with event type 6 (CMV's engine power up/shut down)) for the time period for which this file is generated. It must be rank ordered with the latest activity on top. This section must start with the following title:

CMV Engine Power-Up and Shut Down Activity: <CR>

Each subsequent row must have the following data elements:

<Event Sequence ID Number>,<Event Code>,<{*Event*} Date>,<{*Event*} Time>,<{*Total*} Vehicle Miles>,<{*Total*} Engine Hours>,<{*Event*} Latitude>,<{*Event*} Longitude>,<CMV Power Unit Number>,<CMV VIN>,<Trailer Number(s)>,<Shipping Document Number>,<Line Data Check Value> <CR>

4.8.2.1.10. ELD Event Log List for the Unidentified Driver Profile

This segment must list the ELD event records for the Unidentified Driver profile, rank ordered with most current log on top in accordance with the date and time fields of the logs. This segment has a variable number of rows depending on the number of Unidentified Driver ELD records recorded over the time period for which this file is generated. This section must start with the following title:

Unidentified Driver Profile Records: <CR>

Each subsequent row must have the following data elements:

<Event Sequence ID Number>,<Event Record Status>,<Event Record Origin>,<Event Type>,<Event Code>,<{*Event*} Date>,<{*Event*} Time>,< {*Accumulated*} Vehicle Miles>,< {*Elapsed*} Engine Hours>,<{*Event*} Latitude>,<{*Event*} Longitude>,<Distance Since Last Valid Coordinates>, <{*Corresponding CMV*} Order Number>,<Malfunction Indicator Status {*for ELD*}>,<Event Data Check Value>,<Line Data Check Value> <CR>

4.8.2.1.11. File Data Check Value

This segment lists the file data check value as specified in section 4.4.5.3 of this appendix. This part includes a single line as follows:

End of File: <CR>

<File Data Check Value> <CR>

4.8.2.2. ELD Output File Name Standard

If the ELD output is saved in a file for transfer or maintenance purposes, it must follow the 25 character-long filename standard below:

(a) The first five position characters of the filename must correspond to the first five letters of the last name of the driver for whom the file is compiled. If the last name of the driver is shorter than five characters, remaining positions must use the character ''_'' [underscore] as a substitute character. For example, if the last name of the driver is ''Lee'', the first five characters of the output file must feature ''Lee_ _''.

(b) The sixth and seventh position characters of the filename must correspond to the last two digits of the driver's license number for the driver for whom the file is compiled.

(c) The eighth and ninth position characters of the filename must correspond to the sum of all individual numeric digits in the driver's license number for the driver for whom the file is compiled. The result must be represented in two-digit format. If the sum value exceeds 99, use the last two digits of the result. For example, if the result equals ''113'', use ''13''. If the result is less than 10, use 0 as the first digit. For example, if the result equals ''5'', use ''05''.

(d) The tenth through fifteenth position characters of the filename must correspond to the date the file is created. The result must be represented in six digit format ''MMDDYY'' where ''MM'' represents the month, ''''DD'' represents the day, and ''YY'' represents the last two digits of the year. For example, February 5, 2013, must be represented as ''020513''.

(e) The sixteenth position character of the filename must be a hyphen ''-''.

(f) The seventeenth through twenty-fifth position characters of the filename must, by default, be ''000000000'' but each of these nine digits can be freely configured by the motor carrier or the ELD provider to be a number between 0 and 9 or a character between A and Z to be able to produce distinct files—if or when necessary—that may otherwise be identical in filename as per the convention proposed in this section. ELD providers or motor carriers do not need to

disclose details of conventions they may use for configuring the seventeenth through twenty-fifth digits of the filename.

4.9. Data Transfer Capability Requirements

An ELD must be able to present the captured ELD records of a driver in the standard electronic format as described below, and transfer the data file to an authorized safety official, on demand, for inspection purposes.

4.9.1. Data Transfer During Roadside Safety Inspections

(a) On demand during a roadside safety inspection, an ELD must produce ELD records for the current 24-hour period and the previous 7 consecutive days in electronic format, in the standard data format described in section 4.8.2.1 of this appendix.

(b) When a driver uses the single-step driver interface, as described in section 4.3.2.4 of this appendix, to indicate that the ELD compile and transfer the driver's ELD records to authorized safety officials, the ELD must transfer the generated ELD data output to the computing environment used by authorized safety officials via the standards referenced in this section. To meet roadside electronic data transfer requirements, an ELD must do at least one of the following:

(1) Option 1—Telematics transfer methods. Transfer the electronic data using both:

(i) Wireless Web services, and

(ii) Email, or

(2) Option 2—Local transfer methods. Transfer the electronic data using both:

(i) USB2 (incorporated by reference, see § 395.38), and

(ii) Bluetooth (incorporated by reference, see § 395.38).

(c) The ELD must provide an ELD record for the current 24-hour period and the previous 7 consecutive days as described in section 4.8.1.3 either on a display or on a printout.

(d) An ELD must support one of the two options for roadside data transfer in paragraph (b) of this section, and must certify proper operation of each element under that option. An authorized safety official will specify which transfer mechanism the official will use within the certified transfer mechanisms of an ELD.

4.9.2. Motor Carrier Data Reporting

(a) An ELD must be capable of retaining copies of electronic ELD records for a period of at least 6 months from the date of receipt.

(b) An ELD must produce, on demand, a data file or a series of data files of ELD records for a subset of its drivers, a subset of its vehicles, and for a subset of the 6-month record retention period, to be specified by an authorized safety official, in an electronic format standard described in section 4.8.2.1 of this appendix or, if the motor carrier has multiple offices or terminals, within the time permitted under § 390.29.

(c) At a minimum, an ELD must be able to transfer the ELD records electronically by one of the following transfer mechanisms:

(1) Web Services as specified in section 4.10.1.1 of this appendix (but not necessarily wirelessly), and Email as specified 4.10.1.2 (but not necessarily wirelessly); or

(2) USB 2.0 as specified in section 4.10.1.3 of this appendix and Bluetooth, as specified in section 4.10.1.4 (both incorporated by reference, see § 395.38).

4.10. Communications Standards for the Transmittal of Data Files from ELDs

ELDs must transmit ELD records electronically in accordance with the file format specified in section 4.8.2.1 of this appendix and must be capable of a one-way transfer of these records to authorized safety officials upon request as specified in section 4.9.

4.10.1. Data Transfer Mechanisms

For each type of data transfer mechanism, an ELD must follow the specifications in this section.

4.10.1.1. Wireless Data Transfer via Web Services

(a) Transfer of ELD data to FMCSA via Web Services must follow the following standards:

(1) Web Services Description Language (WSDL) 1.1.

(2) Simple Object Access Protocol (SOAP) 1.2 (incorporated by reference, see § 395.38).

(3) Extensible Markup Language (XML) 1.0 5th Edition.

(b) If an ELD provider plans to use Web Services, upon ELD provider registration as described in section 5.1 of this appendix,

(1) FMCSA will provide formatting files necessary to convert the ELD file into an XML format and upload the data to the FMCSA servers. These files include FMCSA's Rules of Behavior, XML Schema, WSDL file, Interface Control Document (ICD), and the ELD Web Services Development Handbook, and

(2) ELD Providers must obtain a Public/Private Key pair compliant with the NIST SP 800–32, Introduction to Public Key Technology and the Federal PKI Infrastructure (incorporated by reference, see § 395.38), and submit the public key with their registration.

(3) ELD Providers will be required to complete a test procedure to ensure their data is properly formatted before they can begin submitting driver's ELD data to the FMCSA server.

(c) ELD data transmission must be accomplished in a way that protects the privacy of the driver(s).

(d) At roadside, if both the vehicle operator and law enforcement have an available data connection, the vehicle operator will initiate the transfer of ELD data to an authorized safety official. In some cases, an ELD may be capable of converting the ELD file to an XML format using an FMCSA-provided schema and upload it using information provided in the WSDL file using SOAP via RFC 7230, RFC 7231, and RFC 5246, Transport Layer Security (TLS) Protocol Version 1.2 (incorporated by reference, see § 395.38).

4.10.1.2. Wireless Data Transfer Through Email

(a) The ELD must attach a file to an email message to be sent using RFC 5321 Simple Mail Transfer Protocol (SMTP) (incorporated by reference, see § 395.38), to a specific email address, which will be shared with the ELD providers during the technology registration process.

(b) The file must have the format described in section 4.8.2.1 of this appendix and must be encrypted using the Secure/Multipurpose Internet Mail Extensions as described in RFC 5751 (incorporated by reference, see § 395.38), and the RSA algorithm as described in RFC 4056 (incorporated by reference, see § 395.38), with the FMCSA public key compliant with NIST SP 800–32 (incorporated by reference, see § 395.38) to be provided to the ELD provider at the time of registration. The content must be encrypted using AESin FIPS Publication 197 (incorporated by reference, see § 395.38), and RFC 3565 (incorporated by reference, see § 395.38).

(c) The email must be formatted using the RFC 5322 Internet Message Format (incorporated by reference, see § 395.38), as follows:

Element	Format
To :	<Address Provided by FMCSA during online registration>
From :	<Desired return address for confirmation>
Subject :	ELD records from <ELD Registration ID><':'> <ELD Identifier>
Body :	<Output File Comment>
Attachment: ..	MIME encoded AES–256 encrypted file with <filename>.<Date string>.<unique identifier>.aes

(d) A message confirming receipt of the ELD file will be sent to the address specified in the email. The filename must follow the convention specified in section 4.8.2.2 of this appendix.

4.10.1.3 Data Transfer via USB 2.0

(a) ELDs certified for the USB data transfer mechanism must be capable of transferring ELD records using the Universal Serial Bus Specification (Revision 2.0) (incorporated by reference, see § 395.38).

(b) Each ELD technology must implement a single USB-compliant interface with the necessary adaptors for a Type A connector. The USB interface must implement the Mass Storage class (08h) for driverless operation, to comply with IEEE standard 1667–2009, (incorporated by reference, see § 395.38).

(c) The ELD must be capable of providing power to a standard USB-compatible drive.

(d) An ELD must re-authenticate the driver prior to saving the driver's ELD file to an external device.

(e) On initiation by an authenticated driver, an ELD must be capable of saving ELD file(s) to USB-compatible drives (AES, in FIPS Publication 197, incorporated by reference, see § 395.38) that are provided by authorized safety officials during an inspection. Prior to initiating this action, ELDs must be capable of reading a text file from an authorized safety officials' drive and verifying it against a file provided to ELD providers who have registered their technologies as described in section 5.1 of this appendix.

4.10.1.4. Data Transfer via Bluetooth®

(a) Bluetooth SIG Specification of the Bluetooth System covering core package

version 2.1 + EDR (incorporated by reference, see § 395.38) must be followed. ELDs using this standard must be capable of displaying a Personal Identification Number generated by the Bluetooth application profile for bonding with other devices(incorporated by reference, see § 395.38).

(b) Upon request of an authorized official, the ELD must become discoverable by the authorized safety officials' Bluetooth-enabled computing platform, and generate a random code, which the driver must share with the official (incorporated by reference, see § 395.38).

(c) The ELD must connect to the roadside authorized safety officials' technology via wireless personal area network and transmit the required data via Web Services as described in section 4.10.1.1 of this appendix.

4.10.2. Motor Carrier Data Transmission

Regardless of the roadside transmission option supported by an ELD, ELD records are to be retained and must be able to transmit enforcement-specified historical data for their drivers using one of the methods specified under section 4.9.2 of this appendix.

(a) Web services option must follow the specifications described under section 4.10.1.1 of this appendix.

(b) The email option must follow the specifications described under section 4.10.1.2 of this appendix.

(c) The USB option must follow the specifications of Universal Serial Bus Specification, revision 2.0 (incorporated by reference, see § 395.38) and described in section 4.10.1.3 of this appendix.

(d) Bluetooth must follow the specifications incorporated by reference (see § 395.38) and described in section 4.10.1.4 of this appendix.

5. ELD Registration and Certification

As described in § 395.22(a) of this part, motor carriers must only use ELDs that are listed on the FMCSA Web site. An ELD provider must register with FMCSA and certify each ELD model and version for that ELD to be listed on this Web site.

5.1. ELD Provider's Registration

5.1.1. Registering Online

(a) An ELD provider developing an ELD technology must register online at a secure FMCSA Web site where the ELD provider can securely certify that its ELD is compliant with this appendix.

(b) Provider's registration must include the following information:

(1) Company name of the technology provider/manufacturer.

(2) Name of an individual authorized by the provider to verify that the ELD is compliant with this appendix and to certify it under section 5.2 of this appendix.

(3) Address of the registrant.

(4) Email address of the registrant.

(5) Telephone number of the registrant.

5.1.2. Keeping Information Current

The ELD provider must keep the information in section 5.1.1(b) of this appendix current through FMCSA's Web site.

5.1.3. Authentication Information Distribution

FMCSA will provide a unique ELD registration ID, authentication key(s), authentication file(s), and formatting and configuration details required in this appendix to registered providers during the registration process.

5.2. Certification of Conformity With FMCSA Standards

A registered ELD provider must certify that each ELD model and version has been sufficiently tested to meet the functional requirements included in this appendix under the conditions in which the ELD would be used.

5.2.1. Online Certification

(a) An ELD provider registered online as described in section 5.1.1 of this appendix must disclose the information in paragraph (b) of this section about each ELD model and version and certify that the particular ELD is compliant with the requirements of this appendix.

(b) The online process will only allow a provider to complete certification if the provider successfully discloses all of the following required information:

(1) Name of the product.

(2) Model number of the product.

(3) Software version of the product.

(4) An ELD identifier, uniquely identifying the certified model and version of the ELD, assigned by the ELD provider in accordance with section 7.15 of this appendix.

(5) Picture and/or screen shot of the product.

(6) User's manual describing how to operate the ELD.

(7) Description of the supported and certified data transfer mechanisms and step-by-step instructions for a driver to produce and transfer the ELD records to an authorized safety official.

(8) Summary description of ELD malfunctions.

(9) Procedure to validate an ELD authentication value as described in section 7.14 of this appendix.

(10) Certifying statement describing how the product was tested to comply with FMCSA regulations.

5.2.2. Procedure To Validate an ELD's Authenticity

Paragraph 5.2.1(b)(9) of this appendix requires that the ELD provider identify its authentication process and disclose necessary details for FMCSA systems to independently verify the ELD authentication values included in the dataset of inspected ELD outputs. The authentication value must include a hash component that only uses data elements included in the ELD dataset and datafile. ELD authentication value must meet the requirements specified in section 7.14 of this appendix.

5.3. Publicly Available Information

Except for the information listed under paragraphs 5.1.1(b)(2), (4), and (5) and 5.2.1(b)(9) of this appendix, FMCSA will make the information in sections 5.1.1 and 5.2.1 for each certified ELD publicly available on a Web site to allow motor carriers to determine which products have been properly registered and certified as ELDs compliant with this appendix.

5.4. Removal of Listed Certification

5.4.1. Removal Process

FMCSA may remove an ELD model or version from the list of ELDs on the FMCSA Web site in accordance with this section.

5.4.2. Notice

FMCSA shall initiate the removal of an ELD model or version from the list of ELDs on the FMCSA Web site by providing the ELD provider written notice stating:

(a) The reasons FMCSA proposes to remove the model or version from the FMCSA list; and

(b) Any corrective action that the ELD provider must take for the ELD model or version to remain on the list.

5.4.3. Response

An ELD provider that receives notice under section 5.4.2 of this appendix may submit a response to the Director, Office of Carrier Driver, and Vehicle Safety Standards no later than 30 days after issuance of the notice of proposed removal, explaining:

(a) The reasons why the ELD provider believes the facts relied on by the Agency, in proposing removal, are wrong; or

(b) The action the ELD provider will take to correct the deficiencies that FMCSA identified.

5.4.4. Agency Action

(a) If the ELD provider fails to respond within 30 days of the date of the notice issued under section 5.4.2 of this appendix, the ELD model or version shall be removed from the FMCSA list.

(b) If the ELD provider submits a timely response, the Director, Office of Carrier, Driver, and Vehicle Safety Standards, shall review the response and withdraw the notice of proposed removal, modify the notice of proposed removal, or affirm the notice of proposed removal, and notify the ELD provider in writing of the determination.

(c) Within 60 days of the determination, the ELD provider shall take any action required to comply. If the Director determines that the ELD provider failed to timely take the required action within the 60 day period, the ELD model or version shall be removed from the FMCSA list.

(d) The Director, Office of Carrier, Driver, and Vehicle Safety Standards may request from the ELD provider any information that the Director considers necessary to make a determination under this section.

5.4.5. Administrative Review

(a) Within 30 days of removal of an ELD model or version from the FMCSA list of certified ELDs under section 5.4.4 of this appendix, the ELD provider may request administrative review.

(b) A request for administrative review must be submitted in writing to the FMCSA Associate Administrator for Policy. The request must explain the error committed in removing the ELD model or version from the FMCSA list, identify all factual, legal, and procedural issues in dispute, and include any supporting information or documents.

(c) The Associate Administrator may ask the ELD provider to submit additional information or attend a conference to discuss the removal. If the ELD provider does not submit the requested information or attend the scheduled conference, the Associate Administrator may dismiss the request for administrative review.

(d) The Associate Administrator will complete the administrative review and notify the ELD provider of the decision in writing. The decision constitutes a final Agency action.

6. References

(a) *American National Standards Institute (ANSI).* 11 West 42nd Street, New York, New York 10036, *http://webstore.ansi.org*, (212) 642–4900.

(1) ANSI INCITS 4–1986 (R2012), American National Standard for Information Systems—Coded Character Sets—7-Bit American National Standard Code for Information Interchange (7-Bit ASCII), approved June 14, 2007, IBR in section 4.8.2.1, Appendix A to subpart B.

(2) ANSI INCITS 446–2008 (R2013), American National Standard for Information Technology—Identifying Attributes for Named Physical and Cultural Geographic Features (Except Roads and Highways) of the United States, Territories, Outlying Areas, and Freely Associated Areas, and the Waters of the Same to the Limit of the Twelve-Mile Statutory Zone, approved October 28, 2008, IBR in section 4.4.2, Appendix A to subpart B.

(b) *Bluetooth SIG, Inc.* 5209 Lake Washington Blvd. NE., Suite 350, Kirkland, WA 98033, *https://www.bluetooth.org/Technical/Specifications/adopted.htm*, (425) 691–3535.

(1) Bluetooth SIG, Inc., Specification of the Bluetooth System: Wireless Connections Made Easy, Covered Core Package version 2.1 + EDR, volumes 0 through 4, approved July 26, 2007, IBR in sections 4.9.1, 4.9.2, 4.10.1.4, 4.10.2, Appendix A to subpart B.

(2) [Reserved]

(c) *Institute of Electrical and Electronic Engineers (IEEE) Standards Association.* 445 Hoes Lane, Piscataway, NJ 08854–4141, *http://standards.ieee.org/index.html*, (732) 981–0060.

(1) IEEE Std 1667–2009, IEEE Standard for Authentication in Host Attachments of Transient Storage Devices, approved 11 November 2009, IBR in section 4.10.1.3, Appendix A to subpart B.

(2) [Reserved]

(d) *Internet Engineering Task Force (IETF).* C/o Association Management Solutions, LLC (AMS) 48377 Freemont Blvd., Suite 117, Freemont, CA 94538, (510) 492–4080.

(1) IETF RFC 3565, Use of the Advanced Encryption Standard (AES) Encryption Algorithm in Cryptographic Message Syntax (CMS), approved July 2003, IBR in section 4.10.1.2, Appendix A to subpart B.

(2) IETF RFC 4056, Use of the RSASSA–PSS Signature Algorithm in Cryptographic Message Syntax (CMS), approved June 2005, IBR in section 4.10.1.2, Appendix A to subpart B.

(3) IETF RFC 5246, The Transport Layer Security (TLS) Protocol Version 1.2, approved August 2008, IBR in section 4.10.1.1, Appendix A to subpart B.

(4) IETF RFC 5321, Simple Mail Transfer Protocol, approved October 2008, IBR in section 4.10.1.2, Appendix A to subpart B.

(5) IETF RFC 5322, Internet Message Format, approved October 2008, IBR in section 4.10.1.2, Appendix A to subpart B.

(6) IETF RFC 5751, Secure/Multipurpose Internet Mail Extensions (S/MIME) Version 3.2, Message Specification, approved January 2010, IBR in section 4.10.1.2, Appendix A to subpart B.

(7) IETF RFC 7230, Hypertext Transfer Protocol (HTTP/1.1): Message Syntax and Routing, approved June 2014, IBR in section 4.10.1.1, Appendix A to subpart B.

(8) IETF RFC 7231, Hypertext Transfer Protocol (HTTP/1.1): Semantics and Content, approved June 2014, IBR in section 4.10.1.1, Appendix A to subpart B.

(e) *National Institute of Standards and Technology (NIST).* 100 Bureau Drive, Stop 1070, Gaithersburg, MD 20899–1070, *http://www.nist.gov*, (301) 975–6478.

(1) Federal Information Processing Standards Publication (FIPS PUB) 197, Advanced Encryption Standard (AES), approved November 26, 2001, IBR in sections 4.10.1.2 and 4.10.1.3, Appendix A to subpart B.

(2) SP 800–32, Introduction to Public Key Technology and the Federal PKI Infrastructure, approved February 26, 2001, IBR in section 4.10.1.2, Appendix A to subpart B.

(f) *Universal Serial Bus Implementers Forum (USBIF).* 3855 SW. 153rd Drive, Beaverton, Oregon 97006, *http://www.usb.org*, (503) 619–0426.

(1) USB Implementers Forum, Inc., Universal Serial Bus Specification, Revision 2.0, approved April 27, 2000, as revised through April 3, 2015, IBR in sections 4.9.1, 4.9.2, 4.10.1.3, and 4.10.2, Appendix A to subpart B.

(2) [Reserved]

(g) *World Wide Web Consortium (W3C).* 32 Vassar Street, Building 32–G514, Cambridge, MA 02139, *http://www.w3.org*, (617) 253–2613.

(1) W3C Recommendation 27, SOAP Version 1.2 Part 1: Messaging Framework (Second Edition), including errata, approved April 2007, IBR in section 4.10.1.1, Appendix A to subpart B.

(2) [Reserved]

7. Data Elements Dictionary

7.1. 24-Hour Period Starting Time

Description: This data element refers to the 24-hour period starting time specified by the motor carrier for driver's home terminal.

Purpose: Identifies the bookends of the work day for the driver; makes ELD records consistent with § 395.8 requirements, which require this information to be included on the form.

Source: Motor carrier.

Used in: ELD account profile; ELD outputs.

Data Type: Programmed or populated on the ELD during account creation and maintained by the motor carrier to reflect true and accurate information for drivers.

Data Range: 000000 to 235959; first two digits 00 to 23; middle two digits and last two digits 00 to 59.

Data Length: 6 characters.

Data Format: <HHMMSS> Military time format, where ''HH'' refers to hours, ''MM'' refers to minutes, and ''SS'' refers to seconds; designation for start time expressed in time standard in effect at the driver's home terminal.

Disposition: Mandatory.

Examples: [060000], [073000], [180000].

7.2. Carrier Name

Description: This data element refers to the motor carrier's legal name for conducting commercial business.

Purpose: Provides a recognizable identifier about the motor carrier on viewable ELD outputs; provides ability to cross check against USDOT number.

Source: FMCSA's Safety and Fitness Electronic Records (SAFER) System.

Used in: ELD account profile.

Data Type: Programmed on the ELD or entered once during the ELD account creation process.

Data Range: Any alphanumeric combination.

Data Length: Minimum: 4; Maximum: 120 characters.

Data Format: <Carrier Name> as in <CCCC> to <CCCC. . . . . .CCCC>.

Disposition: Mandatory.

Example: [CONSOLIDATED TRUCKLOAD INC.].

7.3. Carrier's USDOT Number

Description: This data element refers to the motor carrier's USDOT number.

Purpose: Uniquely identifies the motor carrier employing the driver using the ELD.

Source: FMCSA's Safety and Fitness Electronic Records (SAFER) System.

Used in: ELD account profiles; ELD event records; ELD output file.

Data Type: Programmed on the ELD or entered once during the ELD account creation process.

Data Range: An integer number of length 1–8 assigned to the motor carrier by FMCSA (9 position numbers reserved).

Data Length: Minimum: 1; Maximum: 9 characters.

Data Format: <Carrier's USDOT Number> as in <C to <CCCCCCCCC>.

Disposition: Mandatory.

Examples: [1], [1000003].

7.4. CMV Power Unit Number

Description: This data element refers to the identifier the motor carrier uses for their CMVs in their normal course of business.

Purpose: Identifies the vehicle a driver operates while a driver's ELD records are recorded; Makes ELD records consistent with § 395.8 requirements, which require the truck or tractor number to be included on the form.

Source: Unique CMV identifiers a motor carrier uses in its normal course of business and includes on dispatch documents, or the license number and the licensing State of the power unit.

Used in: ELD event records; ELD output file.

Data Type: Programmed on the ELD or populated by motor carrier's extended ELD system or entered by the driver.

Data Range: Any alphanumeric combination.

Data Length: Minimum: 1; Maximum: 10 characters.

Data Format: <CMV Power Unit Number> as in <C> to <CCCCCCCCCC>.

Disposition: Mandatory for all CMVs operated while using an ELD.

Examples: [123], [00123], [BLUEKW123], [TX12345].

7.5. CMV VIN

Description: This data element refers to the manufacturer-assigned vehicle identification number (VIN) for the CMV powered unit.

Purpose: Uniquely identifies the operated CMV not only within a motor carrier at a given time but across all CMVs sold within a 30-year rolling period.

Source: A robust unique CMV identifier standardized in North America.

Used in: ELD event records; ELD output file.

Data Type: Retrieved from the engine ECM via the vehicle databus.

Data Range: Either blank or 17 characters long as specified by NHTSA in 49 CFR part 565, or 18 characters long with first character assigned as ''-'' (dash) followed by the 17 character long VIN. Check digit, *i.e.,* VIN character position 9, as specified in 49 CFR part 565 must imply a valid VIN.

Data Length: Blank or 17–18 characters.

Data Format: <CMV VIN> or <''-''> <CMV VIN> or <{*blank*}> as in <CCCCCCCCCCCCCCCCC>, or <-CCCCCCCCCCCCCCCCC> or <>.

Disposition: Mandatory for all ELDs linked to the engine ECM and when VIN is available from the engine ECM over the vehicle databus; otherwise optional. If optionally populated and source is not the engine ECM, precede VIN with the character ''-'' in records.

Examples: [1FUJGHDV0CLBP8834], [-1FUJGHDV0CLBP8896], [].

7.6. Comment/Annotation

Description: This is a textual note related to a record, update, or edit capturing the comment or annotation a driver or authorized support personnel may input to the ELD.

Purpose: Provides ability for a driver to offer explanations to records, selections, edits, or entries.

Source: Driver or authorized support personnel.

Used in: ELD events; ELD outputs.

Data Type: Entered by the authenticated user via ELD's interface.

Data Range: Free form text of any alphanumeric combination.

Data Length: 0–60 characters if optionally entered; 4–60 characters if annotation is required and driver is prompted by the ELD.

Data Format: <Comment/Annotation> as in <{blank}> or <C> to <CCC. . . . . CCC>.

Disposition: Optional in general; Mandatory if prompted by ELD.

Examples: [], [Personal Conveyance. Driving to Restaurant in bobtail mode], [Forgot to switch to SB. Correcting here].

7.7. Data Diagnostic Event Indicator Status

Description: This is a Boolean indicator identifying whether the used ELD unit has an active data diagnostic event set for the authenticated driver at the time of event recording.

Purpose: Documents the snapshot of ELD's data diagnostic status for the authenticated driver at the time of an event recording.

Source: ELD internal monitoring functions.

Used in: ELD events; ELD outputs.

Data Type: Internally monitored and managed.

Data Range: 0 (no active data diagnostic events for the driver) or 1 (at least one active data diagnostic event set for the driver).

Data Length: 1 character.

Data Format: <Data Diagnostic Event Indicator Status> as in <C>.

Disposition: Mandatory.

Examples: [0] or [1].

7.8. Date

Description: In combination with the variable ''Time'', this parameter stamps records with a reference in time; even though date and time must be captured in UTC, event records must use date and time converted to the time zone in effect at the driver's home terminal as specified in section 4.4.3.

Purpose: Provides ability to record the instance of recorded events.

Source: ELD's converted time measurement.

Used in: ELD events; ELD outputs.

Data Type: UTC date must be automatically captured by ELD; date in effect at the driver's home terminal must be calculated as specified in section 4.4.3.

Data Range: Any valid date combination expressed in <MMDDYY> format where ''MM'' refers to months, ''DD'' refers to days of the month and ''YY'' refers to the last two digits of the calendar year.

Data Length: 6 characters.

Data Format: <MMDDYY> where <MM> must be between 01 and 12, <DD> must be between 01 and 31, and <YY> must be between 00 and 99.

Disposition: Mandatory.

Examples: [122815], [010114], [061228].

7.9. Distance Since Last Valid Coordinates

Description: Distance in whole miles traveled since the last valid latitude, longitude pair the ELD measured with the required accuracy.

Purpose: Provides ability to keep track of location for recorded events in cases of temporary position measurement outage.

Source: ELD internal calculations.

Used in: ELD events; ELD outputs.

Data Type: Kept track of by the ELD based on position measurement validity.

Data Range: An integer value between 0 and 6; If the distance traveled since the last valid coordinate measurement exceeds 6 miles, the ELD must enter the value as 6.

Data Length: 1 character.

Data Format: <Distance Since Last Valid Coordinates> as in <C>.

Disposition: Mandatory.

Examples: [0], [1], [5], [6].

7.10. Driver's License Issuing State

Description: This data element refers to the issuing State, Province or jurisdiction of the listed Driver's License for the ELD account holder.

Purpose: In combination with ''Driver's License Number'', it links the ELD driver account holder uniquely to an individual with driving credentials; ensures that only one driver account can be created per individual.

Source: Driver's license.

Used in: ELD account profile(s); ELD output file.

Data Type: Entered (during the creation of a new ELD account).

Data Range: To character abbreviation listed on Table 5 of this appendix.

Data Length: 2 characters.

Data Format: <Driver's License Issuing State> as in <CC>.

Disposition: Mandatory for all driver accounts created on the ELD; optional for ''non-driver'' accounts.

Example: [WA].

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Table 5

State and Province Abbreviation Codes

U.S.A.

STATE CODE	STATE	STATE CODE	STATE
AL	ALABAMA	MT	MONTANA
AK	ALASKA	NC	NORTH CAROLINA
AR	ARKANSAS	ND	NORTH DAKOTA
AZ	ARIZONA	NE	NEBRASKA
CA	CALIFORNIA	NH	NEW HAMPSHIRE
CO	COLORADO	NJ	NEW JERSEY
CT	CONNECTICUT	NM	NEW MEXICO
DC	DIST of COL	NV	NEVADA
DE	DELAWARE	NY	NEW YORK
FL	FLORIDA	OH	OHIO
GA	GEORGIA	OK	OKLAHOMA
HI	HAWAII	OR	OREGON
IA	IOWA	PA	PENNSYLVANIA
ID	IDAHO	RI	RHODE ISLAND
IL	ILLINOIS	SC	SOUTH CAROLINA
IN	INDIANA	SD	SOUTH DAKOTA
KS	KANSAS	TN	TENNESSEE
KY	KENTUCKY	TX	TEXAS
LA	LOUISIANA	UT	UTAH
MA	MASSACHUSETTS	VA	VIRGINIA
MD	MARYLAND	VT	VERMONT
ME	MAINE	WA	WASHINGTON
MI	MICHIGAN	WI	WISCONSIN
MN	MINNESOTA	WV	WEST VIRGINIA
MO	MISSOURI	WY	WYOMING
MS	MISSISSIPPI		

AMERICAN POSSESSIONS OR PROTECTORATES

STATE CODE	STATE
AS	AMERICAN SAMOA
GU	GUAM
MP	NORTHERN MARIANAS
PR	PUERTO RICO
VI	VIRGIN ISLANDS

CANADA

PROVINCE CODE	PROVINCE
AB	ALBERTA
BC	BRITISH COLUMBIA

MB	MANITOBA
NB	NEW BRUNSWICK
NF	NEWFOUNDLAND
NS	NOVA SCOTIA
NT	NORTHWEST TERRITORIES
ON	ONTARIO
PE	PRINCE EDWARD ISLAND
QC	QUEBEC
SK	SASKATCHEWAN
YT	YUKON TERRITORY

MEXICO

STATE CODE	STATE	STATE CODE	STATE
AG	AGUASCALIENTES	MX	MEXICO
BN	BAJA CALIFORNIA NORTE	NA	NAYARIT
BS	BAJA CALIFORNIA SUR	NL	NUEVO LEON
CH	COAHUILA	OA	OAXACA
CI	CHIHUAHUA	PU	PUEBLA
CL	COLIMA	QE	QUERETARO
CP	CAMPECHE	QI	QUINTANA ROO
CS	CHIAPAS	SI	SINALOA
DF	DISTRICTO FEDERAL	SL	SAN LUIS POTOSI
DG	DURANGO	SO	SONORA
GE	GUERRERO	TA	TAMAULIPAS
GJ	GUANAJUATO	TB	TABASCO
HD	HIDALGO	TL	TLAXCALA
JA	JALISCO	VC	VERACRUZ
MC	MICHOACAN	YU	YUCATAN
MR	MORELOS	ZA	ZACATECAS

OTHER

PROVINCE CODE	PROVINCE, STATE or COUNTRY
OT	ALL OTHERS NOT COVERED ABOVE

BILLING CODE 4910–EX–P

7.11. Driver's License Number

Description: This data element refers to the unique Driver's License information required for each driver account on the ELD.

Purpose: In combination with driver's license issuing State, it links the ELD driver account holder to an individual with driving credentials; ensures that only one driver account can be created per individual.

Source: Driver's license.

Used in: ELD account profile(s); ELD output file.

Data Type: Entered (during the creation of a new ELD account).

Data Range: Any alphanumeric combination.

Data Length: Minimum: 1; Maximum: 20 characters.

Data Format: <Driver's License Number> as in <C> to <CCCCCCCCCCCCCCCCCCCC>. For ELD record keeping purposes, ELD must only retain characters in a Driver's License Number entered during an account creation process that are a number between 0–9 or a character between A–Z (non-case sensitive).

Disposition: Mandatory for all driver accounts created on the ELD; optional for ''non-driver'' accounts.

Examples: [SAMPLMJ065LD], [D000368210361], [198], [N02632676353666].

7.12. Driver's Location Description

Description: This is a textual note related to the location of the CMV input by the driver upon ELD's prompt.

Purpose: Provides ability for a driver to enter location information related to entry of missing records; provides ability to accommodate temporary positioning service interruptions or outage without setting positioning malfunctions.

Source: Driver, only when prompted by the ELD.

Used in: ELD events; ELD outputs.

Data Type: Entered by the authenticated driver when ELD solicits this information as specified in section 4.3.2.7.

Data Range: Free form text of any alphanumeric combination.
Data Length: 5–60 characters.
Data Format: <CCCCC> to <CCC.....CCC>.
Disposition: Mandatory when prompted by ELD.
Examples: [], [5 miles SW of Indianapolis, IN], [Reston, VA].

7.13. ELD Account Type

Description: An indicator designating whether an ELD account is a driver account or support personnel (non-driver) account.
Purpose: Enables authorized safety officials to verify account type specific requirements set forth in this document.
Source: ELD designated.
Used in: ELD outputs.
Data Type: Specified during the account creation process and recorded on ELD.
Data Range: Character ''D'', indicating account type ''Driver'', or ''S'', indicating account type ''motor carrier's support personnel'' (*i.e.* non-driver); ''Unidentified Driver'' account must be designated with type ''D''.
Data Length: 1 character.
Data Format: <C>.
Disposition: Mandatory.
Examples: [D], [S].

7.14. ELD Authentication Value

Description: An alphanumeric value that is unique to an ELD and verifies the authenticity of the given ELD.
Purpose: Provides ability to cross-check the authenticity of an ELD used in the recording of a driver's records during inspections.
Source: ELD provider-assigned value; includes a certificate component and a hashed component; necessary information related to authentication keys and hash procedures disclosed by the registered ELD provider during the online ELD certification process for independent verification by FMCSA systems.
Used in: ELD outputs.
Data Type: Calculated from the authentication key and calculation procedure privately distributed by the ELD provider to FMCSA during the ELD registration process.
Data Range: Alphanumeric combination.
Data Length: 16–32 characters.
Data Format: <CCCC.....CCCC>.
Disposition: Mandatory.
Example: [D3A4506EC8FF566B506EC8FF 566BDFBB].

7.15. ELD Identifier

Description: An alphanumeric identifier assigned by the ELD provider to the ELD technology that is certified by the registered provider at FMCSA's Web site.
Purpose: Provides ability to cross-check that the ELD used in the recording of a driver's records is certified through FMCSA's registration and certification process as required.
Source: Assigned and submitted by the ELD provider during the online certification of an ELD model and version.
Used in: ELD outputs.
Data Type: Coded on the ELD by the ELD provider and disclosed to FMCSA during the online certification process.
Data Range: A six character alphanumeric identifier using characters A–Z and number 0–9.
Data Length: 6 characters.
Data Format: <ELD Identifier> as in <CCCCCC>.
Disposition: Mandatory.
Examples: [1001ZE], [GAM112], [02P3P1].

7.16. ELD Provider

Description: An alphanumeric company name of the technology provider as registered at the FMCSA's Web site.
Purpose: Provides ability to cross-check that the ELD used in the recording of a driver's records is certified through FMCSA's registration and certification process as required.
Source: Assigned and submitted by the ELD provider during the online registration process.
Used in: ELD outputs.
Data Type: Coded on the ELD by the ELD provider and disclosed to FMCSA during the online registration process.
Data Range: Any alphanumeric combination.
Data Length: Minimum: 4; Maximum 120 characters.
Data Format: <ELD Provider> as in <CCCC> to <CCCC.....CCCC>.
Disposition: Mandatory.
Examples: [ELD PROVIDER INC].

7.17. ELD Registration ID

Description: An alphanumeric registration identifier assigned to the ELD provider that is registered with FMCSA during the ELD registration process.
Purpose: Provides ability to cross-check that the ELD provider has registered as required.
Source: Received from FMCSA during online provider registration.
Used in: ELD outputs.
Data Type: Coded on the ELD by the provider.
Data Range: A four character alphanumeric registration identifier using characters A–Z and numbers 0–9.
Data Length: 4 characters.
Data Format: <ELD Registration ID> as in <CCCC>.
Disposition: Mandatory.
Examples: [ZA10], [QA0C], [FAZ2].

7.18. ELD Username

Description: This data element refers to the unique user identifier assigned to the account holder on the ELD to authenticate the corresponding individual during an ELD login process; the individual may be a driver or a motor carrier's support personnel.
Purpose: Documents the user identifier assigned to the driver linked to the ELD account.
Source: Assigned by the motor carrier during the creation of a new ELD account.
Used in: ELD account profile; event records; ELD login process.
Data Type: Entered (during account creation and user authentication).
Data Range: Any alphanumeric combination.
Data Length: Minimum: 4; Maximum: 60 characters.
Data Format: <ELD Username> as in <CCCC> to <CCCC.....CCCC>.
Disposition: Mandatory for all accounts created on the ELD.
Examples: [smithj], [100384], [sj2345], [john.smith].

7.19. Engine Hours

Description: This data element refers to the time the CMV's engine is powered in decimal hours with 0.1 hr (6-minute) resolution; this parameter is a placeholder for <{Total} Engine Hours>, which refers to the aggregated time of a vehicle's engine's operation since its inception, and used in recording ''engine power on'' and ''engine shut down'' events, and also for <{Elapsed} Engine Hours>, which refers to the elapsed time in the engine's operation in the given ignition power on cycle, and used in the recording of all other events.
Purpose: Provides ability to identify gaps in the operation of a CMV, when the vehicle's engine may be powered but the ELD may not; provides ability to cross check integrity of recorded data elements in events and prevent gaps in the recording of ELD.
Source: ELD measurement or sensing.
Used in: ELD events; ELD outputs.
Data Type: Acquired from the engine ECM or a comparable other source as allowed in section 4.3.1.4.
Data Range: For <{Total} Engine Hours>, range is between 0.0 and 99,999.9; for <{Elapsed} Engine Hours>, range is between 0.0 and 99.9.
Data Length: 3–7 characters.
Data Format: <Vehicle Miles> as in <C.C> to <CCCCC.C>.
Disposition: Mandatory.
Examples: [0.0], [9.9], [346.1], [2891.4].

7.20. Event Code

Description: A dependent attribute on ''Event Type'' parameter that further specifies the nature of the change indicated in ''Event Type''; this parameter indicates the new status after the change.
Purpose: Provides ability to code the specific nature of the change electronically.
Source: ELD internal calculations.
Used in: ELD event records; ELD outputs.
Data Type: ELD recorded and maintained event attribute in accordance with the type of event and nature of the new status being recorded.
Data Range: Dependent on the ''Event Type'' as indicated on Table 6 of this appendix.
Data Length: 1 character.
Data Format: <Event Type> as in <C>.
Disposition: Mandatory.
Examples: [0], [1], [4], [9].

BILLING CODE 4910–EX–P

Table 6

"Event Type" Parameter Coding

Event Type	Event Code	Event Code Description
1	1	Driver's duty status changed to "Off-duty"
1	2	Driver's duty status changed to "Sleeper Berth"
1	3	Driver's duty status changed to "Driving"
1	4	Driver's duty status changed to "On-duty not driving"
2	1	Intermediate log with conventional location precision
2	2	Intermediate log with reduced location precision
3	1	Driver indicates "Authorized Personal Use of CMV"
3	2	Driver indicates "Yard Moves"
3	0	Driver indication for PC, YM and WT cleared
4	1	Driver's first certification of a daily record
4	n	Driver's n'th certification of a daily record (when recertification necessary). "n" is an integer between 1 and 9. If more than 9 certifications needed, use 9 for each new re-certification record.
5	1	Authenticated driver's ELD login activity
5	2	Authenticated driver's ELD logout activity
6	1	Engine power-up with conventional location precision
6	2	Engine power-up with reduced location precision
6	3	Engine shut down with conventional location precision
6	4	Engine shut-down with reduced location precision
7	1	An ELD malfunction logged
7	2	An ELD malfunction cleared
7	3	A data diagnostic event logged
7	4	A data diagnostic event cleared

BILLING CODE 4910–EX–C

7.21. Event Data Check Value

Description: A hexadecimal ''check'' value calculated in accordance with the procedure outlined in section 4.4.5.1 of this appendix and attached to each event record at the time of recording.

Purpose: Provides ability to identify cases where an ELD event record may have been inappropriately modified after its original recording.

Source: ELD internal.

Used in: ELD events; ELD output file.

Data Type: Calculated by the ELD in accordance with section 4.4.5.1 of this appendix.

Data Range: A number between hexadecimal 00 (decimal 0) and hexadecimal FF (decimal 255).

Data Length: 2 characters.

Data Format: <Event Data Check Value> as in <CC>.

Disposition: Mandatory.

Examples: [05], [CA], [F3].

7.22. Event Record Origin

Description: An attribute for the event record indicating whether it is automatically recorded, or edited, entered or accepted by the driver, requested by another authenticated user, or assumed from unidentified driver profile.

Purpose: Provides ability to track origin of the records.

Source: ELD internal calculations.

Used in: ELD event records; ELD outputs.

Data Type: ELD recorded and maintained event attribute in accordance with the procedures outlined in sections 4.4.4.2.2, 4.4.4.2.3, 4.4.4.2.4, 4.4.4.2.5, and 4.4.4.2.6 of this appendix.

Data Range: 1, 2, 3 or 4 as described on Table 7 of this appendix.

Data Length: 1 character.

Data Format: <Event Record Origin> as in <C>.

Disposition: Mandatory.

Examples: [1], [2], [3], [4].

Table 7

"Event Record Origin" Parameter Coding

Event Record Origin	Event Record Origin Code
Automatically recorded by ELD	1
Edited or entered by the Driver	2
Edit requested by an Authenticated User other than the Driver	3
Assumed from Unidentified Driver profile	4

7.23. Event Record Status

Description: An attribute for the event record indicating whether an event is active or inactive and further, if inactive, whether it is due to a change or lack of confirmation by the driver or due to a driver's rejection of change request.

Purpose: Provides ability to keep track of edits and entries performed over ELD records while retaining original records.

Source: ELD internal calculations.

Used in: ELD event records; ELD outputs.

Data Type: ELD recorded and maintained event attribute in accordance with the procedures outlined in sections 4.4.4.2.2, 4.4.4.2.3, 4.4.4.2.4, 4.4.4.2.5, and 4.4.4.2.6 of this appendix.

Data Range: 1, 2, 3 or 4 as described on Table 8 of this appendix.

Data Length: 1 character.

Data Format: <Event Record Status> as in <C>.

Disposition: Mandatory.

Examples: [1], [2], [3], [4].

Table 8

"Event Record Status" Parameter Coding

Event Record Status	Event Record Status Code
Active	1
Inactive – Changed	2
Inactive – Change Requested	3
Inactive – Change Rejected	4

7.24. Event Sequence ID Number

Description: This data element refers to the serial identifier assigned to each required ELD event as described in section 4.5.1 of this appendix.

Purpose: Provides ability to keep a continuous record, on a given ELD, across all users of that ELD.

Source: ELD internal calculations.

Used in: ELD event records; ELD outputs.

Data Type: ELD maintained; incremented by 1 for each new record on the ELD; continuous for each new event the ELD records regardless of owner of the records.

Data Range: 0 to FFFF; initial factory value must be 0; after FFFF hexadecimal (decimal 65535), the next Event Sequence ID number must be 0.

Data Length: 1–4 characters.

Data Format: <Event Sequence ID Number> as in <C> to <CCCC>.

Disposition: Mandatory.

Examples: [1], [1F2C], p2D3], [BB], [FFFE].

7.25. Event Type

Description: An attribute specifying the type of the event record.

Purpose: Provides ability to code the type of the recorded event in electronic format.

Source: ELD internal calculations.

Used in: ELD event records; ELD outputs.

Data Type: ELD recorded and maintained event attribute in accordance with the type of event being recorded.

Data Range: 1–7 as described on Table 9 of this appendix.

Data Length: 1 character.

Data Format: <Event Type> as in <C>.

Disposition: Mandatory.

Examples: [1], [5], [4], [7].

Table 9

"Event Type" Parameter Coding

Event Type	Event Type Code
A change in driver's duty-status	1
An intermediate log	2
A change in driver's indication of authorized personal use of CMV or yard moves	3
A driver's certification/re-certification of records	4
A driver's login/logout activity	5
CMV's engine power up / shut down activity	6
A malfunction or data diagnostic detection occurrence	7

7.26. Exempt Driver Configuration

Description: A parameter indicating whether the motor carrier configured a driver's profile to claim exemption from ELD use.

Purpose: Provides ability to code the motor carrier-indicated exemption for the driver electronically.

Source: Motor carrier's configuration for a given driver.

Used in: ELD outputs.

Data Type: Motor carrier configured and maintained parameter in accordance with the qualification requirements listed in § 395.1.

Data Range: E (exempt) or 0 (number zero).

Data Length: 1 character.

Data Format: <Exempt Driver Configuration> as in <C>.

Disposition: Mandatory.

Examples: [E], [0].

7.27. File Data Check Value

Description: A hexadecimal ''check'' value calculated in accordance with the procedure outlined in section 4.4.5.3 of this appendix and attached to each ELD output file.

Purpose: Provides ability to identify cases where an ELD file may have been inappropriately modified after its original creation.

Source: ELD internal.

Used in: ELD output files.

Data Type: Calculated by the ELD in accordance with section 4.4.5.3 of this appendix.

Data Range: A number between hexadecimal 0000 (decimal 0) and hexadecimal FFFF (decimal 65535).

Data Length: 4 characters.

Data Format: <File Data Check Value> as in <CCCC>.

Disposition: Mandatory.

Examples: [F0B5], [00CA], [523E].

7.28. First Name

Description: This data element refers to the given name of the individual holding an ELD account.

Purpose: Links an individual to the associated ELD account.

Source: Driver's license for driver accounts; driver's license or government-issued ID for support personnel accounts.

Used in: ELD account profile(s); ELD outputs (display and file).

Data Type: Entered (during the creation of a new ELD account).

Data Range: Any alphanumeric combination.

Data Length: Minimum: 2; Maximum: 30 characters.

Data Format: <First Name> as in <CC> to <CC.....CC> where ''C'' denotes a character.

Disposition: Mandatory for all accounts created on the ELD.

Example: [John].

7.29. Geo-Location

Description: A descriptive indicator of the CMV position in terms of a distance and direction to a recognizable location derived from a GNIS database at a minimum containing all cities, towns and villages with a population of 5,000 or greater.

Purpose: Provide recognizable location information on a display or printout to users of the ELD.

Source: ELD internal calculations as specified in section 4.4.2 of this appendix.

Used in: ELD display or printout.

Data Type: Identified from the underlying latitude/longitude coordinates by the ELD.

Data Range: Contains four segments in one text field; a recognizable location driven from GNIS database containing—at a minimum—all cities, towns and villages with a population of 5,000 in text format containing a location name and the State abbreviation, distance from this location and direction from this location.

Data Length: Minimum: 5; Maximum: 60 characters.

Data Format: <Distance from {*identified*} Geo-location> <'mi '> <Direction from {*identified*} Geo-location> <' '> <State Abbreviation {*of identified*} Geo Location> <' '> <Place name of {*identified*} Geo-location> where:

<Distance from {*identified*} Geo-location> must either be <{blank}> or <C> or <CC> where the up-to two character number specifies absolute distance between identified geo-location and event location;

<Direction from {*identified*} Geo-location> must either be <{blank}> or <C> or <CC> or <CCC>, must represent direction of event location with respect to the identified geo-location, and must take a value listed on Table 10 of this appendix;<State Abbreviation {*of identified*} Geo Location> must take values listed on Table 5; <Place name of {*identified*} Geo-location> must be the text description of the identified reference location;

Overall length of the ''Geo-location'' parameter must not be longer than 60 characters long.

Disposition: Mandatory.

Examples: [2mi ESE IL Darien], [1mi SE TX Dallas], [11mi NNW IN West Lafayette].

Table 10

Conventional Compass Rose Direction Coding To Be Used in the Geo-Location Parameter.

Direction	Direction Code
At indicated geo-location	{blank}
North of indicated geo-location	N
North – North East of indicated geo-location	NNE
North East of indicated geo-location	NE
East – North East of indicated geo-location	ENE
East of indicated geo-location	E
East – South East of indicated geo-location	ESE
South East of indicated geo-location	SE
South – South East of indicated geo-location	SSE
South of indicated geo-location	S
South – South West of indicated geo-location	SSW
South West of indicated geo-location	SW
West – South West of indicated geo-location	WSW
West of indicated geo-location	W
West – North West of indicated geo-location	WNW
North West of indicated geo-location	NW
North– North West of indicated geo-location	NNW

7.30. Last Name

Description: This data element refers to the last name of the individual holding an ELD account.

Purpose: Links an individual to the associated ELD account.

Source: Driver's license for driver accounts; driver's license or government-issued ID for support personnel accounts.

Used in: ELD account profile(s); ELD outputs (display and file).

Data Type: Entered (during the creation of a new ELD account).

Data Range: Any alphanumeric combination.

Data Length: Minimum: 2; Maximum: 30 characters.

Data Format: <Last Name> as in <CC> to <CC.....CC>.

Disposition: Mandatory for all accounts created on the ELD.

Example: [Smith].

7.31. Latitude

Description: An angular distance in degrees north and south of the equator.

Purpose: In combination with the variable ''Longitude'', this parameter stamps records requiring a position attribute with a reference point on the face of the earth.

Source: ELD's position measurement.

Used in: ELD events; ELD outputs.

Data Type: Latitude and Longitude must be automatically captured by the ELD.

Data Range: −90.00 to 90.00 in decimal degrees (two decimal point resolution) in records using conventional positioning precision; −90.0 to 90.0 in decimal degrees (single decimal point resolution) in records using reduced positioning precision when allowed; latitudes north of the equator must be specified by the absence of a minus sign (−) preceding the digits designating degrees; latitudes south of the Equator must be designated by a minus sign (−) preceding the digits designating degrees.

Data Length: 3 to 6 characters.

Data Format: First character: [<'−'> or <{blank}>]; then [<C> or <CC>]; then <'.'>; then [<C> or <CC>].

Disposition: Mandatory.

Examples: [−15.68], [38.89], [5.07], [−6.11], [−15.7], [38.9], [5.1], [−6.1].

7.32. Line Data Check Value

Description: A hexadecimal ''check'' value calculated in accordance with procedure outlined in section 4.4.5.2 and attached to each line of output featuring data at the time of output file being generated.

Purpose: Provides ability to identify cases where an ELD output file may have been inappropriately modified after its original generation.

Source: ELD internal.

Used in: ELD output file.

Data Type: Calculated by the ELD in accordance with 4.4.5.2.

Data Range: A number between hexadecimal 00 (decimal 0) and hexadecimal FF (decimal 255) .

Data Length: 2 characters.

Data Format: <Line Data Check Value> as in <CC>.

Disposition: Mandatory.

Examples: [01], [A4], [CC].

7.33. Longitude

Description: An angular distance in degrees measured on a circle of reference with respect to the zero (or prime) meridian; The prime meridian runs through Greenwich, England.

Purpose: In combination with the variable ''Latitude'', this parameter stamps records requiring a position attribute with a reference point on the face of the earth.

Source: ELD's position measurement.

Used in: ELD events; ELD outputs.

Data Type: Latitude and Longitude must be automatically captured by the ELD.

Data Range: −179.99 to 180.00 in decimal degrees (two decimal point resolution) in records using conventional positioning precision; −179.9 to 180.0 in decimal degrees (single decimal point resolution) in records using reduced positioning precision when allowed; longitudes east of the prime meridian must be specified by the absence of a minus sign (−) preceding the digits designating degrees of longitude; longitudes west of the prime meridian must be designated by minus sign (−) preceding the digits designating degrees.

Data Length: 3 to 7 characters.

Data Format: First character: [<'−'> or <{blank}>]; then [<C>, <CC> or <CCC>]; then <'.'>; then [<C> or <CC>].

Disposition: Mandatory.

Examples: [−157.81], [−77.03], [9.05], [−0.15], [−157.8], [−77.0], [9.1], [−0.2].

7.34. Malfunction/Diagnostic Code

Description: A code that further specifies the underlying malfunction or data diagnostic event.

Purpose: Enables coding the type of malfunction and data diagnostic event to cover the standardized set in Table 4 of this appendix.
Source: ELD internal monitoring.
Used in: ELD events; ELD outputs.
Data Type: Recorded by ELD when malfunctions and data diagnostic events are set or reset.
Data Range: As specified in Table 4 of this appendix.
Data Length: 1 character.
Data Format: <C>.
Disposition: Mandatory.
Examples: [1], [5], [P], [L].

7.35. Malfunction Indicator Status

Description: This is a Boolean indicator identifying whether the used ELD unit has an active malfunction set at the time of event recording.
Purpose: Documents the snapshot of ELD's malfunction status at the time of an event recording.
Source: ELD internal monitoring functions.
Used in: ELD events; ELD outputs.
Data Type: Internally monitored and managed.
Data Range: 0 (no active malfunction) or 1 (at least one active malfunction).
Data Length: 1 character.
Data Format: <Malfunction Indicator Status> as in <C>.
Disposition: Mandatory.
Examples: [0] or [1].

7.36. Multiday Basis Used

Description: This data element refers to the multiday basis (7 or 8 days) used by the motor carrier to compute cumulative duty hours.
Purpose: Provides ability to apply the HOS rules accordingly.
Source: Motor carrier.
Used in: ELD account profile; ELD outputs.
Data Type: Entered by the motor carrier during account creation process.
Data Range: 7 or 8.
Data Length: 1 character.
Data Format: <Multiday basis used> as in <C>.
Disposition: Mandatory.
Examples: [7], [8].

7.37. Order Number

Description: A continuous integer number assigned in the forming of a list, starting at 1 and incremented by 1 for each unique item on the list.
Purpose: Allows for more compact report file output generation avoiding repetitious use of CMV identifiers and usernames affected in records.
Source: ELD internal.
Used in: ELD outputs, listing of users and CMVs referenced in ELD logs.
Data Type: Managed by ELD.
Data Range: Integer between 1 and 99.
Data Length: 1–2 characters.
Data Format: <Order Number> as in <C> or <CC>.
Disposition: Mandatory.
Examples: [1], [5], [11], [28].

7.38. Output File Comment

Description: A textual field that may be populated with information pertaining to the created ELD output file; An authorized safety official may provide a key phrase or code to be included in the output file comment, which may be used to link the requested data to an inspection, inquiry, or other enforcement action; if provided to the driver by an authorized safety official, it must be entered into the ELD and included in the exchanged dataset as specified.
Purpose: The output file comment field provides an ability to link submitted data to an inspection, inquiry, or other enforcement action, if deemed necessary; further, it may also link a dataset to a vehicle, driver, carrier, and/or ELD that may participate in voluntary future programs that may involve exchange of ELD data.
Source: Enforcement personnel or driver or motor carrier.
Used in: ELD outputs.
Data Type: If provided, output file comment is entered or appended to the ELD dataset prior to submission of ELD data to enforcement.
Data Range: Blank or any alphanumeric combination specified and provided by an authorized safety official.
Data Length: 0–60 characters.
Data Format: <{blank}>, or <C> thru <CCCC.....CCCC>.
Disposition: Mandatory.
Examples: [], [3BHG701015], [113G1EFW02], [7353930].

7.39. Shipping Document Number

Description: Shipping document number the motor carrier uses in their system and dispatch documents.
Purpose: Links ELD data to the shipping records; makes ELD dataset consistent with § 395.8 requirements.
Source: Motor carrier.
Used in: ELD outputs.
Data Type: Entered in the ELD by the authenticated driver or motor carrier and verified by the driver.
Data Range: Any alphanumeric combination.
Data Length: 0–40 characters.
Data Format: <{blank}>, or <C> thru <CCCC.....CCCC>.
Disposition: Mandatory if a shipping number is used on motor carrier's system.
Examples: [], [B 75354], [FX334411707].

7.40. Time

Description: In combination with the variable ''Date'', this parameter stamps records with a reference in time; even though date and time must be captured in UTC, event records must use date and time converted to the time zone in effect at the driver's home terminal as specified in section 4.4.3 of this appendix.
Purpose: Provides ability to record the instance of recorded events.
Source: ELD's converted time measurement.
Used in: ELD events; ELD outputs.
Data Type: UTC time must be automatically captured by ELD; time in effect at the driver's home terminal must be calculated as specified in section 4.4.3 of this appendix.
Data Range: Any valid date combination expressed in <HHMMSS> format where ''HH'' refers to hours of the day, ''MM'' refers to minutes, and ''SS'' refers to seconds.
Data Length: 6 characters.
Data Format: <HHMMSS> where <HH> must be between 00 and 23, <MM> and <SS> must be between 00 and 59.
Disposition: Mandatory.
Examples: {070111}, {001259}, {151522}, {230945}.

7.41. Time Zone Offset from UTC

Description: This data element refers to the offset in time between UTC time and the time standard in effect at the driver's home terminal.
Purpose: Establishes the ability to link records stamped with local time to a universal reference.
Source: Calculated from measured variable <{*UTC*} Time> and <{*Time Standard in Effect at driver's home terminal*} Time>; Maintained together with ''24-hour Period Starting Time'' parameter by the motor carrier or tracked automatically by ELD.
Used in: ELD account profile; ELD event: Driver's certification of own records.
Data Type: Programmed or populated on the ELD during account creation and maintained by the motor carrier or ELD to reflect true and accurate information for drivers. This parameter must adjust for Daylight Saving Time changes in effect at the driver's home terminal.
Data Range: 04 to 11; omit sign.
Data Length: 2 characters.
Data Format: <Time Zone Offset from UTC> as in <HH> where ''HH'' refer to hours in difference.
Disposition: Mandatory.
Examples: {04}, {05}, {10}.

7.42. Trailer Number(s)

Description: This data element refers to the identifier(s) the motor carrier uses for the trailers in their normal course of business.
Purpose: Identifies the trailer(s) a driver operates while a driver's ELD records are recorded; makes ELD records consistent with § 395.8 which requires the trailer number(s) to be included on the form.
Source: Unique trailer identifiers a motor carrier uses in their normal course of business and includes on dispatch documents, or the license number and licensing State of each towed unit; trailer number(s) must be updated each time hauled trailers change.
Data Type: Automatically captured by the ELD or populated by motor carrier's extended ELD system or entered by the driver; must be updated each time the hauled trailer(s) change.
Data Range: Any alphanumeric combination.
Data Length: Minimum: blank; Maximum: 32 characters (3 trailer numbers each maximum 10 characters long, separated by spaces).
Data Format: Trailer numbers; separated by space in case of multiple trailers hauled at one time; field to be left ''blank'' for non-combination vehicles (such as a straight truck or bobtail tractor).
<Trailer Unit Number {#1}><' '><Trailer Unit Number {#2}> <' '><Trailer Unit Number {#3}> as in <{blank}> to

<CCCCCCCCCC CCCCCCCCCC CCCCCCCCCC>.

Disposition: Mandatory when operating combination vehicles.

Examples: {987}, {00987 PP2345}, {BX987 POP712 10567}, {TX12345 LA22A21}.

7.43. Vehicle Miles

Description: This data element refers to the distance traveled using the CMV in whole miles; this parameter is a placeholder for <{Total} Vehicle Miles>, which refers to the odometer reading and is used in recording ''engine power on'' and ''engine shut down'' events, and also for <{Accumulated} Vehicle Miles>, which refers to the accumulated miles in the given ignition power on cycle and is used in the recording of all other events.

Purpose: Provides ability to track distance traveled while operating the CMV in each duty status. Total miles traveled within a 24-hour period is a required field in § 395.8.

Source: ELD measurement or sensing.

Used in: ELD events; ELD outputs.

Data Type: Acquired from the engine ECM or a comparable other source as allowed in section 4.3.1.3.

Data Range: For <{Total} Vehicle Miles>, range is between 0 and 9,999,999; for <{Accumulated} Vehicle Miles>, range is between 0 and 9,999.

Data Length: 1–7 characters.

Data Format: <Vehicle Miles> as in <C> to <CCCCCCC>.

Disposition: Mandatory.

Examples: [99], [1004566], [0], [422].

Issued under authority delegated in 49 CFR 1.87 on: November 23, 2015.

T.F. Scott Darling, III,

Acting Administrator.

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Part III

Department of Transportation

National Highway Traffic Safety Administration

49 CFR Part 571
Rear Impact Guards, Rear Impact Protection; Proposed Rule

DEPARTMENT OF TRANSPORTATION

National Highway Traffic Safety Administration

49 CFR Part 571

[Docket No. NHTSA–2015–0118]

RIN 2127–AL58

Rear Impact Guards, Rear Impact Protection

AGENCY: National Highway Traffic Safety Administration (NHTSA), Department of Transportation.

ACTION: Notice of proposed rulemaking (NPRM).

SUMMARY: This NPRM proposes to upgrade the Federal motor vehicle safety standards that address rear underride protection in crashes into trailers and semitrailers. NHTSA is proposing to adopt requirements of Transport Canada's standard for underride guards, which require rear impact guards to provide sufficient strength and energy absorption to protect occupants of compact and subcompact passenger cars impacting the rear of trailers at 56 kilometers per hour (km/h) (35 miles per hour (mph)). NHTSA is issuing this NPRM in response to a petition for rulemaking from the Insurance Institute for Highway Safety (IIHS), and from Ms. Marianne Karth and the Truck Safety Coalition (TSC). This is the second of two documents issued in response to the Karth/TSC petition. Earlier, NHTSA published an advanced notice of proposed rulemaking requesting comment on strategies pertaining to underride protection afforded by single unit trucks.

DATES: You should submit your comments early enough to ensure that the docket receives them not later than February 16, 2016.

ADDRESSES: You may submit comments to the docket number identified in the heading of this document by any of the following methods:

- *Federal eRulemaking Portal:* Go to *http://www.regulations.gov*. Follow the online instructions for submitting comments.
- *Mail:* Docket Management Facility, M–30, U.S. Department of Transportation, West Building, Ground Floor, Rm. W12–140, 1200 New Jersey Avenue SE., Washington, DC 20590.
- *Hand Delivery or Courier:* West Building Ground Floor, Room W12–140, 1200 New Jersey Avenue SE., between 9 a.m. and 5 p.m. Eastern Time, Monday through Friday, except Federal holidays.
- *Fax:* (202) 493–2251.

Regardless of how you submit your comments, please mention the docket number of this document. You may also call the Docket at 202–366–9324.

Instructions: For detailed instructions on submitting comments and additional information on the rulemaking process, see the Public Participation heading of the **SUPPLEMENTARY INFORMATION** section of this document. Note that all comments received will be posted without change to *http://www.regulations.gov*, including any personal information provided.

Privacy Act: Please see the Privacy Act heading under Rulemaking Analyses and Notices.

FOR FURTHER INFORMATION CONTACT: For technical issues, you may contact Robert Mazurowski, Office of Crashworthiness Standards (telephone: 202–366–1012) (fax: 202–493–2990). For legal issues, you may contact Deirdre Fujita, Office of Chief Counsel (telephone: 202–366–2992) (fax: 202–366–3820). The address for these officials is: National Highway Traffic Safety Administration, U.S. Department of Transportation, 1200 New Jersey Avenue SE., West Building, Washington, DC 20590.

SUPPLEMENTARY INFORMATION:

Table of Contents

I. Executive Summary

Introduction

This NPRM proposes to upgrade Federal Motor Vehicle Safety Standard (FMVSS) No. 223, ''Rear impact guards,'' and FMVSS No. 224, ''Rear impact protection,'' which together address rear underride protection in crashes into trailers and semitrailers. NHTSA is proposing to adopt requirements of the Canada Motor Vehicle Safety Standard (CMVSS) for underride guards (CMVSS No. 223, ''Rear impact guards,'') that became effective in 2007. The CMVSS No. 223 requirements are intended to provide rear impact guards with sufficient strength and energy absorption capability to protect occupants of compact and subcompact passenger cars impacting the rear of trailers at 56 km/h (35 mph). As the current requirements in FMVSS Nos. 223 and 224 were developed with the intent of providing underride crash protection to occupants of compact and subcompact passenger cars in impacts up to 48 km/h (30 mph) into the rear of trailers, increasing the robustness of the trailer/guard design such that it will be able to withstand crash velocities up to 56 km/h (35 mph) represents a substantial increase in the stringency of FMVSS Nos. 223 and 224.

This NPRM also proposes to adopt Transport Canada's definition of ''rear extremity'' to define where on a trailer aerodynamic fairings are to be located to avoid posing a safety hazard in rear underride crashes.

Rear underride crashes are those in which the front end of a vehicle impacts the rear of a generally larger vehicle, and slides under the rear-impacted vehicle. Underride may occur to some extent in collisions in which a small passenger vehicle crashes into the rear end of a large trailer or semi-trailer because the bed and chassis of the impacted vehicle is higher than the hood of the passenger vehicle. In excessive underride crashes, there is ''passenger compartment intrusion'' (PCI) as the passenger vehicle underrides so far that the rear end of the struck vehicle collides with and enters the passenger compartment of the striking passenger vehicle. PCI can result in severe injuries and fatalities to occupants contacting the rear end of the struck vehicle. An underride guard prevents PCI when it engages the striking end of the smaller vehicle and stops the vehicle from sliding too far under the struck vehicle's bed and chassis.

The occupant crash protection features built into today's passenger vehicles are able to provide high levels of occupant protection in 56 km/h (35 mph) frontal crashes.[1] If guards were

[1] When FMVSS Nos. 223 and 224 were promulgated, FMVSS No. 208, ''Occupant crash protection,'' required all passenger cars to comply to a full frontal 48 km/h (30 mph) rigid barrier crash test by ensuring that the injury measures of crash test dummies positioned in the front seating positions were within the allowable limits. In 2000, NHTSA amended FMVSS No. 208 to provide

made stronger to remain in place and prevent PCI in crashes of severities of up to 56 km/h (35 mph), the impacting vehicle's occupant protection technologies could absorb enough of the crash forces resulting from the impact to significantly reduce the risk of fatality and serious injury to the occupants of the colliding vehicle.

Origins of This Rulemaking

NHTSA's interest in this rulemaking originated from the findings of a 2009 NHTSA study [2] to evaluate why fatalities were still occurring in frontal crashes despite high rates of seat belt use and the presence of air bags and other advanced safety features. NHTSA reviewed cases of frontal crash fatalities to belted drivers and/or right-front passengers in model year (MY) 2000 or newer vehicles in the Crashworthiness Data System of the National Automotive Sampling System (NASS–CDS) through calendar year 2007. Among the 122 fatalities examined in this review, 49 (40 percent) were in exceedingly severe crashes that were not survivable, 29 (24 percent) were in oblique or corner impact crashes where there was low engagement of the striking vehicle's structural members (a factor which would have resulted in the striking vehicle absorbing more of the crash energy), and 17 (14 percent) were underrides into single unit trucks (SUTs) [3] and trailers (14 were rear underride and 3 were side underride).[4] In survivable frontal crashes of newer vehicle models resulting in fatalities to belted vehicle occupants, rear underrides into large SUTs and trailers were the second highest cause of fatality.

In 2010, NHTSA published the results of a study, analyzing several data sources, to determine the effectiveness of trailer rear impact guards compliant with FMVSS Nos. 223 and 224 in preventing fatalities and serious injuries.[5] The agency's analysis of the Fatality Analysis Reporting System (FARS) could not establish a nationwide downward trend in fatalities to passenger vehicle occupants in impacts with the rear of trailers subsequent to the implementation of FMVSS Nos. 223 and 224. While supplemental data collected in Florida and North Carolina showed decreases in fatalities and serious injuries, the observed decrease in fatalities in these two States was not statistically significant, possibly due to small sample sizes of the data.

Following these two studies, NHTSA undertook research to examine the agency's underride protection requirements, highlighting this program as a significant one in the ''NHTSA Vehicle Safety and Fuel Economy Rulemaking and Research Priority Plan 2011–2013 (March 2011).''

One of the resulting research projects began in 2010, as NHTSA initiated research with the University of Michigan Transportation Research Institute (UMTRI) to gather data on the rear geometry of SUTs and trailers, the configuration of rear impact guards on SUTs and trailers, and the incidence and extent of underride and fatalities in rear impacts with SUTs and trailers. UMTRI collected the supplemental information as part of its Trucks Involved in Fatal Accidents (TIFA) survey for the years 2008 and 2009.[6] [7] These data enabled NHTSA to obtain national estimates of rear impact crashes into heavy vehicles that resulted in PCI. We discuss details of the study in Appendix A of this preamble.

More information was obtained in 2011 from IIHS, which petitioned NHTSA to upgrade FMVSS Nos. 223 and 224 to improve the strength and energy-absorbing capabilities of rear impact guards.[8] IIHS based its petition on a detailed review of rear impacts into trucks and trailers from DOT's Large Truck Crash Causation Study (LTCCS) [9] [10] and from an initial test series IIHS conducted of 56 km/h (35 mph) passenger car-to-trailer rear impact crashes.[11] Subsequently, IIHS conducted follow on testing of 8 trailer models manufactured in 2012 and 2013 that were equipped with rear impact guards compliant with CMVSS No. 223. NHTSA obtained test data of the initial test series and the follow on testing of trailers. We summarize the IIHS petition and test data below in this preamble and in detail in Appendix B.[12] IIHS suggests that trailers with rear impact guards compliant with CMVSS No. 223 are superior to those compliant with FMVSS No. 224 in mitigating PCI of the striking passenger car. NHTSA has evaluated the data and has agreed with IIHS on that point. Accordingly, we grant the petition and issue this NPRM in response.

In addition, this NPRM responds to a petition for rulemaking from Mrs. Marianne Karth and the Truck Safety Coalition (TSC) (Karth/TSC petition), requesting that NHTSA require underride guards on SUTs and other vehicles not currently required by the FMVSSs to have guards, and improve the standards' requirements for all guards. On July 10, 2014, NHTSA granted the Karth/TSC petition and announced [13] that NHTSA would be pursuing possible rulemaking through: (a) An ANPRM pertaining to rear impact guards for SUTs and other safety strategies not currently required for those vehicles; [14] and (b) an NPRM (which is today's NPRM) to upgrade FMVSS Nos. 223 and 224.

improved frontal crash protection for all occupants by means that include advanced air bag technology. The upgraded standard requires passenger cars to comply with a full frontal 56 km/h (35 mph) rigid barrier crash test by ensuring that the injury measures of crash test dummies restrained in front seating positions are within the allowable limits. In addition, passenger vehicles are tested in frontal crash tests in NHTSA's New Car Assessment Program (NCAP) at crash speeds of 56 km/h (35 mph) and perform very well providing frontal crash occupant protection.

[2] Kahane, et al. ''Fatalities in Frontal Crashes Despite Seat Belts and Air Bags—Review of All CDS Cases—Model and Calendar Years 2000–2007—122 Fatalities,'' September 2009, DOT–HS–811102.

[3] SUTs are trucks with a gross vehicle weight rating (GVWR) greater than 4,536 kilograms (kg) (10,000 pounds (lb)) with no trailer. They are primarily straight trucks, in which the engine, cab, drive train, and cargo area are mounted on one chassis.

[4] In addition, 15 (12 percent) were fatalities to vulnerable occupants (occupants 75 years and older), 4 (3.3 percent) were narrow object impacts, and 8 (6.6 percent) were other types of impact conditions.

[5] Allen, Kirk, ''The Effectiveness of Underride Guards for Heavy Trailers,'' October 2010, DOT HS 811 375. *http://www-nrd.nhtsa.dot.gov/Pubs/811375.pdf*. Last accessed on March 25, 2015.

[6] Analysis of Rear Underride in Fatal Truck Crashes, 2008, DOT HS 811 652, August 2012, infra.

[7] Heavy-Vehicle Crash Data Collection and Analysis to Characterize Rear and Side Underride and Front Override in Fatal Truck Crashes, DOT HS 811 725, March 2013, infra.

[8] A copy of the petition is in the docket for this NPRM.

[9] LTCCS is based on a 3-year data collection project by NHTSA and FMCSA and is the first-ever national study to attempt to determine the critical events and associated factors that contribute to serious large truck crashes. *http://ai.fmcsa.dot.gov/ltccs/default.asp*, last accessed on March 10, 2015.

[10] Brumbelow, M.L. and Blanar, L., ''Evaluation of US Rear Underride Guard Regulation for Large Trucks Using Real-World Crashes,'' Proceedings of the 54th Stapp Car Crash Conference, 119–131, 2010, Warrendale, PA, SAE International.

[11] A discussion of the tests can be found in Brumbelow, M.L., ''Crash Test Performance of Large Truck Rear Impact Guards,'' 22nd International Conference on the Enhanced Safety of Vehicles (ESV), 2011. *http://www-nrd.nhtsa.dot.gov/pdf/esv/esv22/22ESV-000074.pdf*.

[12] In addition, copies of test reports from the program have been placed in NHTSA's general reference docket for rear impact protection, NHTSA–2015–0014.

[13] 79 FR 39362.

[14] In July 2015 (80 FR 43663) (Docket No. NHTSA–2015–0070), NHTSA published the ANPRM relating to SUTs. The ANPRM requests comment on NHTSA's estimated cost and benefits of expanding FMVSS Nos. 223 and 224, to require CMVSS No. 223 guards on SUTs, and of amending FMVSS No. 108, ''Lamps, reflective devices, and associated equipment,'' to require the type of retroreflective material on the rear and sides of SUTs that is now required to be placed on the rear and sides of trailers to improve the conspicuity of the vehicles to other motorists. NHTSA will be following up on issues presented on SUTs in an action separate from today's NPRM.

This NPRM also accords with an April 3, 2014, recommendation from the National Transportation Safety Board (NTSB) regarding tractor-trailer safety (H–14–004). NTSB recommends that NHTSA revise FMVSS Nos. 223 and 224 to ensure that newly manufactured trailers over 4,536 kilograms (kg) (10,000 pounds (lb)) gross vehicle weight rating (GVWR) provide adequate protection of passenger vehicle occupants from fatalities and serious injuries resulting from full-width and offset trailer rear impacts. In its recommendation, NTSB makes favorable reference to IIHS's petition for rulemaking and the testing IIHS conducted. We have carefully considered H–14–004 and have issued this NPRM in response.

Impacts of the Rulemaking

Based on information from the Truck Trailer Manufacturers Association (TTMA),[15] NHTSA estimates that 93 percent of new trailers sold in the U.S. subject to FMVSS Nos. 223 and 224 are already designed to comply with CMVSS No. 223. The agency estimates that about one life and three serious injuries would be saved annually by requiring all applicable trailers to be equipped with CMVSS No. 223 compliant guards. The undiscounted equivalent lives saved are 1.3 per year.

The average incremental cost of equipping CMVSS No. 223 compliant rear impact guards on an applicable new trailer is about $229 and the corresponding average incremental weight increase is 49 lb. The annual average incremental material and fuel cost of requiring all applicable new trailers in the fleet with CMVSS No. 223 guards is $13 million.

Table 1 below presents the net cost and net benefits estimates for requiring CMVSS No. 223 compliant rear impact guards on all applicable new trailers in the fleet. The net cost per equivalent lives saved in 2013 dollars is $9.1 million and $9.5 million discounted at 3 percent and 7 percent, respectively. The net benefit of this proposal in 2013 dollars is $0.59 million and $0.13 million discounted at 3 percent and 7 percent, respectively.

TABLE 1—BENEFIT AND COST, NET COST PER EQUIVALENT LIVES SAVED, AND NET BENEFIT

[All monetized values are in million 2013 dollars]

	Undiscounted	3% Discount	7% Discount
Societal Economic Benefits (a)	$1.72	$1.52	$1.35
Total Safety Benefits (b)	$14.13	$12.37	$10.89
Total Equivalent Lives Saved (c)	1.29	1.13	0.99
Total annual material + fuel Cost (d)	$12.98	$11.77	$10.76
Net Cost (e) = (d) − (a)	$11.26	$10.25	$9.40
Net Cost per Equivalent Lives Saved = (e)/(c)	$8.71	$9.07	$9.47
Net Benefit = (b) − (d)	$1.15	$0.59	$0.13

II. Overview of Existing Standards

FMVSSs

FMVSS Nos. 223 and 224 were established in 1998 to reduce the risk of PCI by upgrading then-existing rear impact guards to make them stronger but energy-absorbing as well. FMVSS No. 223, an equipment standard, specifies strength and energy absorption requirements in quasi-static force tests of rear impact guards sold for installation on new trailers and semitrailers. FMVSS No. 224, a vehicle standard, requires new trailers and semitrailers with a GVWR of 4,536 kg (10,000 lb) or more to be equipped with a rear impact guard meeting FMVSS No. 223.[16] NHTSA established the two-standard approach to provide underride protection in a manner that imposes reasonable compliance burdens on small trailer manufacturers.[17]

Briefly summarized, the requirements of FMVSS No. 223 relevant to this NPRM are as follows. FMVSS No. 223 requires the guard to meet the strength requirements of the standard at certain specified test locations, and the energy absorption requirements of the standard at location ''P3.'' (See Figure 1 below for a depiction of P3 and the other test locations (P1 and P2) on the guard.) Test location P1 is at a distance of 3/8th of the width of the horizontal member on either side of the centerline of the horizontal member. Test location P2 is at the centerline of the horizontal member. Test location P3 is 355 millimeters (mm) (14 inches) to 635 mm (25 inches) from the horizontal member centerline. The strength tests are conducted separately from the energy absorption test.

The strength requirements (S5.2.1 of FMVSS No. 223) specify that the guard must resist the following force levels without deflecting by more than 125 mm (4.9 inches):

- 50,000 Newtons (N) (or 50 kiloNewtons (kN)) at ''P1'' on either the left or the right side of the guard; 50,000 N at ''P2''; and,
- 100,000 N at P3 on either the left or the right side of the guard.

In the strength test, the force is applied by a force application device (rectangular rigid steel solid face of 203 mm × 203 mm and thickness of 25 mm) until the force level is exceeded or until the displacement device is displaced at least 125 mm, whichever occurs first.

The energy absorption requirements (S5.2.2) specify that the guard (other than a hydraulic guard) must absorb, by plastic deformation, within the first 125 mm of deflection at least 5,650 Joules (J) of energy at each test location P3, as illustrated in Figure 2 of the standard. In the test procedure, force is applied to the guard using the force application

[15] TTMA Joint Industry/Government Meeting on July 24, 2014, Embassy Suites Hotel, Alexandria, VA.

[16] Excluded from FMVSS No. 224 are pole trailers, logging trailers, low chassis trailers (trailers where the ground clearance of the chassis is no more than 560 mm (22 inches)), wheels back trailers (trailers with rearmost point of rear wheels within 305 mm (12 inches) of the rear extremity of the trailer), and special purpose trailers (trailers with equipment in the rear and those intended for certain special operations). The exclusions are based on practical problems with meeting the standard or an absence of a need to meet the standard due to, *e.g.,* vehicle configuration.

[17] There are a significant number of small trailer manufacturers. Under FMVSS No. 223, the guard may be tested for compliance while mounted to a test fixture or to a complete trailer. FMVSS No. 224 requires that the guard be mounted on the trailer or semitrailer in accordance with the instructions provided with the guard by the guard manufacturer. Under this approach, a small manufacturer that produces relatively few trailers can certify its trailers to FMVSS No. 224 without feeling compelled to undertake destructive testing of what could be a substantial portion of its production. The two-standard approach was devised to provide small manufacturers a practicable and reasonable means of meeting the safety need served by an underride guard requirement.

device until displacement of the device has reached 125 mm, recording the value of force at least 10 times per 25 mm of displacement. The force is then reduced until the guard no longer offers resistance to the force application device. A force versus deflection diagram is plotted with deflection (measured displacement of the force application device) along the abscissa (x-axis) and the measured force along the ordinate (y-axis), as shown in Figure 2 of the standard, and the energy absorbed by the guard is determined by calculating the shaded area bounded by the curve in the diagram.

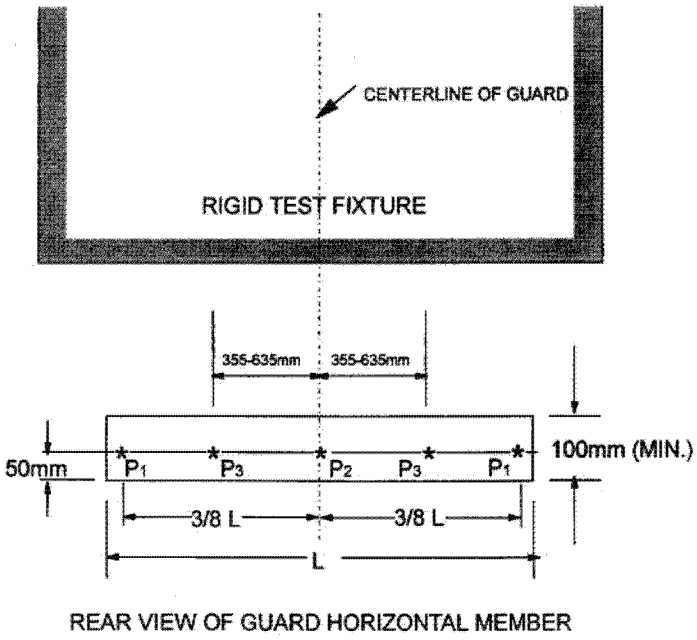


Figure 1: FMVSS No. 223 quasi-static test loading locations

FMVSS No. 224 specifies that the ground clearance (vertical distance of the bottom of the horizontal member from ground) of the rear impact guard be no more than 560 mm (22 inches) and located not more than 305 mm (12 inches) forward of the rear extremity of the trailer and extend laterally to within 100 mm (4 inches) of each side of the vehicle.

CMVSS

Transport Canada's upgraded CMVSS No. 223, ''Rear impact guards,'' was issued in 2005 and became effective in 2007.[18] Given that passenger car models manufactured on or after 2005 in Canada are required to provide adequate occupant protection to restrained occupants in 56 km/h (35 mph) full frontal rigid barrier crashes, Transport Canada requires rear impact guards to provide sufficient strength and energy absorption to prevent PCI of compact and subcompact passenger cars impacting the rear of trailers at 56 km/h (35 mph).[19]

CMVSS No. 223 applies to trailers and semitrailers and specifies quasi-static loading tests similar to those in FMVSS No. 223. However, CMVSS No. 223 replaces the 100,000 N quasi-static point load test at the P3 location in FMVSS No. 223 with a 350,000 N uniform distributed load test on the horizontal member.[20] The guard is required to withstand this load and absorb at least 20,000 J of energy within 125 mm of deflection, and have a ground clearance before and after the test not exceeding 560 mm (22 inches). Optionally, manufacturers may choose to forgo the energy absorption requirement if the guard can resist a uniform distributed load of more than 700,000 N, but would need to ensure that the ground clearance does not exceed 560 mm (22 inches) after the uniform distributed load test. Similar to FMVSS No. 223, CMVSS No. 223 permits testing the rear impact guard when attached, per manufacturer's instructions, to a rigid test fixture or to a complete trailer. Through extensive testing,[21] Transport Canada demonstrated that these requirements would ensure that compact and subcompact passenger cars would not have PCI when rear-ending a CMVSS No. 223 compliant trailer at 56 km/h (35 mph).

CMVSS No. 223 also has similar geometric specifications for rear impact guards as FMVSS No. 224.

Table 2 presents a general comparison of rear impact protection requirements in the U.S. and Canada.

[18] Canada Gazette Part II, Vol. 138, No. 20, 2004–10–06.

[19] Boucher, D. and Davis, D., ''A Discussion on Rear Underride Protection in Canada,'' Informal Document, 127th WP.29, 25–28 June 2002, *http://www.unece.org/fileadmin/DAM/trans/doc/2002/wp29/TRANS-WP29-127-inf05e.pdf*.

[20] The load is applied uniformly across the horizontal member by a uniform load application structure with length that exceeds the distance between the outside edges of the vertical support of the horizontal member and which is centered on the horizontal member of the guard.

[21] Boucher, D., ''Heavy Trailer rear underride crash tests performed with passenger vehicles,'' Technical Memorandum No. TMVS–0001, Transport Canada, Road Safety and Motor Vehicle Regulation Directorate, July 2000.

TABLE 2—COMPARISON OF REAR IMPACT PROTECTION REQUIREMENTS IN THE U.S. AND CANADA

Requirement	U.S.	Canada
Applicable standards	FMVSS No. 223/224	CMVSS No. 223.
Applicable vehicles	Trailers	Trailers.
Ground clearance	560 mm measured before test	560 mm measured before and after energy absorption test (or after the uniform distributed load test for guards with strength exceeding 700,000 N.).
Longitudinal distance from rear extremity.	305 mm	305 mm.
Lateral distance from side of vehicle	100 mm	100 mm.
Point load at P1 (outer edge of guard)	50 kN	50 kN.
Point load at P2 (center of guard)	50 kN	50 kN.
Point load at P3 (at the guard supports)	100 kN with no more than 125 mm displacement, 5,650 J energy absorption within 125 mm displacement.	
Distributed load across width of the guard.		350 kN with no more than 125 mm displacement and 20,000 J energy absorption within 125 mm displacement; or 700 kN with no more than 125 mm displacement.

III. IIHS Petition for Rulemaking [22]

In 2011, IIHS petitioned NHTSA to upgrade FMVSS No. 223 and 224 ''to require underride guards that are strong enough to [allow] the energy absorbing structures of passenger vehicles to deform and provide protection to their occupants.''

IIHS conducted crash tests in which a model year (MY) 2010 Chevrolet Malibu (a midsize sedan) impacted the rear of various trailers equipped with rear impact guards (full overlap of the rear impact guard with the front end of the sedan) at 56 km/h (35 mph).[23] (''Overlap'' refers to the portion of the striking passenger vehicle's width overlapping the underride guard.) A 50th percentile male Hybrid III dummy (HIII 50M) was in each of the front outboard seating positions of the Malibu. IIHS evaluated trailers manufactured by Hyundai, Vanguard, and Wabash. According to the petition, all three trailer/guard designs easily passed FMVSS No. 223's quasi-static tests at P1 and P3 locations, while the Vanguard and Wabash trailers/guards also met the more stringent P3 requirements of CMVSS No. 223.

The Hyundai guard, which only met FMVSS No. 223, resulted in ''catastrophic'' underride of the Malibu (''complete loss of the front occupant survival space'') in the full-overlap test.

In contrast, the Wabash guard (built to CMVSS No. 223 requirements) ''performed well in the full-width and 50 percent overlap conditions, providing much greater protection against underride than the other two guards.'' [24] That is, the rear impact guard on the Wabash trailer, certified to meet FMVSS No. 223 and CMVSS No. 223 requirements, prevented PCI in the 56 km/h (35 mph) crash tests, while the Hyundai guard (certified only to FMVSS No. 223) did not. The Wabash trailer/guard design prevented PCI in both the full-width and the more demanding 50 percent overlap tests.

The Vanguard trailer rear impact guard, certified to FMVSS No. 223 and to CMVSS No. 223, resulted in ''moderate'' [25] and ''severe'' underride (''intrusion extending into the occupant compartment'') in 50 percent overlap tests. IIHS believes that the problem with the Vanguard was that the guard is deemed to have met FMVSS No. 223 and CMVSS No. 223 even though the attachment bolts sheared or pulled away from the guard during the quasi-static test. The petitioner suggests ''the regulations should include a stipulation that all attachment hardware must remain intact for the duration of the test or until reaching a force threshold that is much higher than that required for the guard itself.''

Table 3 summarizes the results of the initial six 56 km/h (35 mph) crash tests. In the first test of the 2007 Hyundai guard, the guard was ripped from the trailer's rear cross member early in the crash, allowing the Malibu to underride the trailer almost to the B-pillar. The heads of both dummies were struck by the hood of the Malibu as it deformed against the rear surface of the trailer. In contrast, under the same test conditions, the main horizontal member of the 2011 Wabash guard bent forward in the center but remained attached to the vertical support members, which showed no signs of separating from the trailer chassis.

TABLE 3—IIHS'S TABLE OF ITS FRONT-INTO-TRAILER REAR CRASH TESTS; 2010 CHEVOLET MALIBU

Trailer	Speed (km/h)	Malibu's overlap with guard	Guard ground clearance (centimeters)	Guard performance	Underride
2007 Hyundai	56	Full-width	47.6	Attachments failed	Catastrophic.
2007 Vanguard	40	50%	42.2	Attachments failed	Moderate.
2007 Vanguard	56	50%	42.7	Attachments failed	Severe.
2011 Wabash	56	Full-width	44.5	Good	None.

[22] IIHS conducted more testing after the initial test program discussed in its petition. NHTSA discusses IIHS's test program in Appendix B of this preamble.

[23] See Brumbelow, M.L., ''Crash Test Performance of Large Truck Rear Impact Guards,'' 22nd International Conference on the Enhanced Safety of Vehicles (ESV), 2011. *http://www-nrd.nhtsa.dot.gov/pdf/esv/esv22/22ESV-000074.pdf.*

[24] In the 30 percent overlap test, the end of the guard bent forward and allowed underride of the Malibu.

[25] IIHS did not define ''moderate'' underride.

TABLE 3—IIHS'S TABLE OF ITS FRONT-INTO-TRAILER REAR CRASH TESTS; 2010 CHEVOLET MALIBU—Continued

Trailer	Speed (km/h)	Malibu's overlap with guard	Guard ground clearance (centi-meters)	Guard performance	Underride
2011 Wabash	56	50%	44.3	End bent forward	None.
2011 Wabash	56	30%	45.3	End bent forward	Catastrophic.

In its petition, IIHS requests that NHTSA:

- Increase the strength requirements for rear impact guards (at least to the levels that are currently required in Canada);
- Evaluate whether ground clearance of rear impact guards can be further reduced;
- Reduce the number of heavy vehicles (trucks and trailers) exempted from requiring rear impact guards;
- Require attachment hardware to remain intact during the quasi-static tests;
- Require rear impact guards to be certified while attached to the trailer for which it is designed; and
- Move the P1 location [26] for the 50,000 N point load quasi-static test more outboard ''to improve offset crash protection.''

IV. Overview of Proposed Changes

This NPRM proposes the following changes to FMVSS Nos. 223 and 224.[27]

1. Performance Requirements

NHTSA has reviewed CMVSS No. 223 and the information provided by IIHS and agrees that CMVSS No. 223's performance requirements for underride guards appear practicable, needed for safety, and objective.[28] Accordingly, NHTSA proposes that the current loading and performance requirements of FMVSS No. 223 be replaced with the specifications in CMVSS No. 223. Specifically:

- Rear impact guards (except as noted below) would be required to resist a uniform distributed load of 350,000 N without deflecting more than 125 mm and while absorbing at least 20,000 J of energy by plastic deformation within the first 125 mm of deflection;
- Alternatively, rear impact guards may resist a minimum uniform distributed load of 700,000 N without deflecting 125 mm.
- In accordance with CMVSS No. 223, we propose to require that rear impact guards be required to maintain a ground clearance after the energy absorption test not exceeding 560 mm. For rear impact guards with strength exceeding 700,000 N in the uniform distributed load test, the post-test ground clearance is measured after the uniform distributed load test. A definition of ''ground clearance'' would be added to FMVSS No. 223.
- NHTSA tentatively agrees with IIHS that FMVSS No. 223 should require that any portion of the rear impact guard and attachments not separate from their mounting structure after completion of the uniform distributed loading test and the energy absorption test.

2. Definition of ''rear extremity'' [29]

We propose to replace the current definition of ''rear extremity'' in FMVSS No. 224 with that specified in CMVSS No. 223. The change is intended to ensure that aerodynamic fairings are located within a certain safe zone at the rear of the trailer. Aerodynamic fairings on the rear of trailers, also known as ''boat tails,'' are rear-mounted panels on trailers that reduce aerodynamic drag and fuel consumption.

The safety concern about boat tails is that they generally extend beyond the rear extremity of trailers and thus can negate the crash protection provided by underride guards. That is, there is a possibility that a boat tail can protrude so far rearward that it can intrude into the passenger compartment in a crash and cause injury, notwithstanding the presence of an upgraded underride guard.

V. Specific Aspects of the Proposal To Upgrade the Standards

Although NHTSA has granted the IIHS and Karth/TSC petitions, not all aspects of the petitions have been granted. Specific aspects of the petitions are discussed below. To the extent NHTSA disagrees with suggested changes to FMVSS Nos. 223 and 224 in the petitions, NHTSA denies the requested change.

a. Strength and Energy Absorption Requirements

Since submitting the petition in 2011, IIHS conducted crash tests with 8 trailer models that were designed to comply with CMVSS No. 223 (see Appendix B of this preamble). As discussed in Appendix B, the dynamic crash tests conducted by IIHS showed that all 8 trailer models that were designed to comply with CMVSS No. 223 were capable of preventing PCI when struck by a mid-sized sedan at 56 km/h (35 mph) and full overlap. Furthermore, 7 of the 8 guards were capable of preventing PCI when struck by a mid-sized sedan at 56 km/h (35 mph) and 50 percent overlap. These data suggest that upgrading the FMVSS No. 223 strength and energy absorption requirements to that of the CMVSS No. 223 requirements would improve guard performance in crashes involving full and 50 percent overlap scenarios.

Agency Decision

NHTSA proposes to harmonize FMVSS No. 223's test and performance requirement at the P3 location to that specified in CMVSS No. 223. Our decision is based on the testing conducted by IIHS and that by Transport Canada, which show that the Canadian compliant guards are able to prevent PCI in 56 km/h light (35 mph) vehicle impacts into the rear of trailers with 100 percent and 50 percent overlap with the guard.

The quasi-static point load test at the P3 location would be replaced by a uniform distributed load test of 350,000 N. The force application device for the uniform distributed load test would be rigid, with a height of 203 mm and a width that exceeds the distance between the outside edges of the outermost load-bearing supports to which the horizontal member is attached. The load would be applied using this load application device, in a similar manner to that currently specified in FMVSS

[26] See Figure 1 of this preamble for the location of P1, supra.

[27] In addition, a few housekeeping amendments are proposed. NHTSA would add back ''low chassis vehicles'' into the list of vehicles excluded from FMVSS No. 224 in the applicability section (S3). The vehicles were excluded from the standard in the January 24, 1996 final rule establishing FMVSS No. 224 (see 61 FR at 2035) but were inadvertently omitted from S3 when S3 was amended by a final rule responding to petitions for reconsideration (63 FR 3654, January 26, 1998). Typographical errors would also be corrected.

[28] See National Traffic and Motor Vehicle Safety Act, 49 U.S.C. 30111(a).

[29] This proposal would also further harmonize FMVSS No. 224 with CMVSS No. 223.

No. 223. The performance requirements would require the rear impact guard to resist the 350,000 N load without deflecting more than 125 mm, absorb at least 20,000 J of energy within 125 mm of guard deflection,[30] and have a ground clearance not exceeding 560 mm after completion of the test.

CMVSS No. 223 permits an option that a rear impact guard does not have to meet energy absorption requirements if it is able to resist 700,000 N of force using the distributed load application device without deflecting more than 125 mm. For guards that can withstand 700,000 N in the uniform distributed load test, the guard is required to have a ground clearance of 560 mm after the uniform distributed load test. Transport Canada states that it permitted this option based on rigid barrier crash test results suggesting that a resistance to a uniform load of at least 700,000 N would help ensure that the rear impact guard will stay in place in an impact with a passenger car at impact speeds of 56 km/h (35 mph) or more.[31] Canada's view is that, given that modern day passenger vehicles are able to protect occupants in rigid barrier tests of up to 56 km/h (35 mph), a rear impact guard that is strong enough to resist loads greater than 700,000 N would not pose any additional injury to occupants at crash speeds of up to 56 km/h (35mph). NHTSA is proposing to include this optional test in FMVSS No. 223, but the agency does not believe guards are or will likely be manufactured to this test. We seek comment on the need for including the test in FMVSS No. 223.

CMVSS No. 223 also permits testing with half of the rear impact guard (for symmetric guards) by applying a 175,000 N distributed load along the length of half of the horizontal member (at the P3 location). The rear impact guard is required to resist this load by deflecting no more than 125 mm, and must absorb at least 10,000 J of energy within 125 mm of guard deflection. At the end of the energy absorption test, the guard must have a ground clearance not exceeding 560 mm. Transport Canada permitted this testing option to reduce costs associated with testing, as manufacturers would be able to use existing testing equipment to demonstrate compliance.[32] [33]

NHTSA is not inclined to include this testing option in FMVSS No. 223. According to the data from 6 trailer manufacturers presented in Table B–3 of Appendix B of this preamble, only one manufacturer conducted the test using half the rear impact guard. We believe that most trailer and rear impact guard manufacturers will not avail themselves of this option, as they are now capable of testing with the uniform distributed load applied to the complete guard. Additionally, testing the full guard may be more beneficial to safety, as such a test is more representative of the guard's performance in the field than testing the guard cut in half. Therefore, the agency is not including this option of testing with half of the rear impact guard in the proposed regulatory text. We seek comment on whether this option should be included in FMVSS No. 223.

b. Ground Clearance

FMVSS No. 224 and CMVSS No. 223 require the bottom edge of the horizontal member of the rear impact guard of the trailer to be no more than 560 mm (22 inches) above the ground when the trailer is unloaded and on level ground. IIHS requests that NHTSA evaluate whether the ground clearance of rear impact guards can be reduced. The Karth/TSC petition suggests that NHTSA require rear impact guards on trailers and semitrailers be mounted 406 mm (16 inches) from the ground.[34]

Agency Decision

NHTSA has considered the petitions and is generally denying the request to lower the ground clearance requirement.

The issue of appropriate rear impact guard ground clearance involves balancing the ability of the guard to provide crashworthiness protection with the operational restrictions associated with lower guard heights. This issue was discussed in detail in the 1996 final rule establishing FMVSS Nos. 223 and 224.[35] At that time, the agency analyzed public comments, vehicle geometry, heavy vehicle operations, and crash test data and concluded that requiring a guard ground clearance lower than 560 mm (22 inches) would cause an undue burden on the industry. The agency was concerned that ground clearance lower than 560 mm (22 inches) would not only cause interference in intermodal operations but also increase the probability that the guard would scrape or snag during normal vehicle operations and be damaged as a result.

For the 1996 final rule, NHTSA conducted a survey of engine block heights and front end profiles of a sample of 40 vehicles and found that the top of the engine block for these vehicles was between 660 and 790 mm (26 and 31 inches, respectively), with an average height of 711 mm (28 inches). The agency's crash tests indicated that rear impact guards with ground clearances of 560 mm (22 inches) that met FMVSS No. 223 prevented PCI in light vehicles. During these tests, the impacting cars had their front ends depressed to simulate the lowering that would be experienced during heavy braking, to simulate a ''worst case scenario'' with regard to guard height. Even in these conditions, the rear impact guard engaged the structure (engine block) of each car, resulting in air bag deployment and low injury measures on the dummies in the front row. Accordingly, the agency decided in the 1996 final rule to specify a ground clearance requirement of 560 mm (22 inches).

Since the 1996 final rule, Transport Canada issued upgraded rear impact guard tests and performance requirements that are intended to prevent PCI in light vehicles at speeds up to 56 km/h (35 mph). According to CMVSS No. 223, after the energy absorption test where the guard is displaced 125 mm, the rear impact guard has to maintain a ground clearance not exceeding 560 mm (22 inches). Transport Canada crash tests showed that rear impact guards with an initial ground clearance of 560 mm that were designed to meet the strength, energy absorption, and ground clearance requirements after the test were able to prevent PCI in small passenger cars impacting the guard at 56 km/h (35 mph).[36] Thus, in response to commenters that suggested further lowering of the guard ground clearance, Transport Canada stated that while it agrees that the ground clearance of rear impact guards is an important factor to preventing PCI, its crash tests of passenger cars into rear impact guards

[30] Canada believes that the energy absorption requirement helps ensure that the guard will not sever from the trailer chassis when an equivalent load is applied. Canada Gazette Part II, Vol. 138, No. 20, 2004–10–06, p. 1335.

[31] Id., p. 1349.

[32] In 2005, guard manufacturers did not have the equipment and loading apparatus to apply a distributed force of 350,000 N required in the full guard test. Therefore, Transport Canada permits testing with half of the guard with the option of applying a point load of 175,000 N at the P2 location. This option permits the manufacturers to utilize then-existing equipment used for certifying FMVSS No. 223 rear impact guards.

[33] Transport Canada noted that a half guard test could potentially be more stringent than a full guard test, but provided no data to support this statement.

[34] The agency interprets this request to mean that the ground clearance of rear impact guards (vertical distance of the bottom of the horizontal member from ground surface) on trailers and semi-trailers be less than or equal to 406 mm.

[35] 61 FR 2004.

[36] Boucher, D., Davis, D.T., ''Trailer Underride Protection—A Canadian perspective,'' SAE technical paper 2000–01–3522, Society of Automotive Engineers, 400 Commonwealth Dr., Warrendale, PA 15096–0001.

of different heights found that sufficient strength of the guard and a 560 mm (22 inch) ground clearance after the test were more important factors in preventing PCI than a reduced initial ground clearance and no post-test ground clearance requirement.[37]

NHTSA concurs with Transport Canada's position on maintaining the maximum allowable ground clearance of rear impact guards at 560 mm (22 inches). Because the upgrades to FMVSS Nos. 223 and 224 will require substantially increased strength of rear impact guards and require 560 mm (22 inches) maximum ground clearance of the guards before and after the energy absorption test, the agency believes reducing the ground clearance of trailer rear impact guards from 560 mm (22 inches) to a lower level is not needed.

The maximum required ground clearance of 560 mm (22 inches) is sufficiently low to engage the engine block of an impacting passenger vehicle. NHTSA gathered data on the vertical height of passenger vehicle bumpers and the top of the engine block from the ground on 50 vehicles crash-tested in 2013 under the agency's New Car Assessment Program, as shown in Table 4. NHTSA chose the engine block height as a suitable metric to represent a major structural element of the striking vehicle that would engage the rear impact guard to mitigate PCI. These light vehicles consisted of hatchbacks, sedans, coupes, minivans, station wagons, utility vehicles, and extended cab pickups.

The average height of the top of the engine block was 889 mm (35 inches) with a standard deviation of 102 mm (4.0 inches), and a range of 739 mm (29.1 inches) to 1300 mm (51.2 inches). The lowest average height of the top of the engine block was a 5-door hatchback with a height of 804 mm (31.7 inches).[38]

TABLE 4—ENGINE BLOCK VERTICAL HEIGHT FROM GROUND LEVEL IN MY 2013 VEHICLES [39]

Vehicle type	Quantity	Percent of population sampled	Average height of engine block top (mm)
Five Door Hatchback	5	10	804
Four Door Sedan	19	38	862
Two Door Coupe	4	8	848
Minivan	1	2	822
Station Wagon	2	4	853
Utility Vehicle	17	34	924
Extended Cab Pickup	2	4	1235

NHTSA also does not believe that the ground clearance of the guard needs to be reduced because fleet data suggest that where possible, trailer manufacturers are voluntarily installing rear impact guards with ground clearances under 560 mm (22 inches).

NHTSA evaluated the ground clearance of rear impact guards in the current trailer fleet by analyzing the supplemental data on the rear geometry of trailers that UMTRI collected as part of 2008 and 2009 TIFA survey.[40] Guard ground clearance was reported for trailers that had rear impact guards in the combined TIFA data for 2008 and 2009. The mean, median, mode, and standard deviation of the ground clearance is shown for rear impact guards on trailers (Table 5). The data indicate that the mean ground clearance of rear impact guards on trailers in the current fleet is 536 mm (21.1 inches), lower than the maximum allowable ground clearance of 560 mm (22 inches). Further, an evaluation of trailers manufactured in 1998 and later in the 2008–2009 TIFA data files from UMTRI showed that the average ground clearance of rear impact guards for newer (MY 1998+) trailer models was 457 mm (18 inches).

TABLE 5—REAR IMPACT GUARD GROUND CLEARANCE FROM THE 2013 UMTRI STUDY

[Supplemental data in 2008 and 2009 TIFA datafiles]

Truck configuration	Maximum allowable ground clearance mm (inches)	N	Mean mm (inches)	Median mm (inches)	Mode mm (inches)	Standard deviation mm (inches)
Trailer	560 (22)	3380	536 (21.1)	508 (20)	610 (24)	107 (4.2)

The agency also conducted an informal survey of trailers at a weigh station by the southbound lanes of I–81 near Stephen City, Virginia in August 2012. The sample consisted of 47 trailers (van and flatbed) that were directed to the inspection lot after passing through the weigh scales. Thirty of the trailers had guards and the ground clearance of the rear impact guards on these trailers ranged from 376 mm to 546 mm (14.8 inches to 21.5 inches) with an average value of 472 mm (18.6 inches).

Another reason not to reduce the current ground clearance requirement of 560 mm is because NHTSA is proposing to adopt the CMVSS No. 223 requirement that the rear impact guard must maintain the 560 mm (22 inches) of ground clearance *after* the energy absorption uniform distributed load test. It is possible that to meet the post-test ground clearance requirements, the rear

[37] Canada Gazette Part II, Vol. 138, No. 20 SOR/DORS/2004–195.

[38] It is noteworthy that the top of the engine block is higher in the MY 2013 vehicles than in the vehicles surveyed by NHTSA in 1993, which had showed an average top of engine block height of 711 mm (28 inches).

[39] From Safercar.gov at *http://www.safercar.gov/Vehicle+Shoppers/5-Star+Safety+Ratings/1990-2010+Vehicles.*

[40] Heavy-Vehicle Crash Data Collection and Analysis to Characterize Rear and Side Underride and Front Override in Fatal Truck Crashes, DOT HS 811 725, March 2013.

impact guards will be installed with ground clearance lower than the required 560 mm. For trailers involved in IIHS testing, the average ground clearance of the guards that were certified to CMVSS No. 223 was 443 mm.

NHTSA is not proposing to reduce the maximum allowable ground clearance of rear impact guards also because NHTSA continues to be concerned that a lower guard ground clearance requirement may interfere with functionality of some of the vehicles. For example, in intermodal operations, some trailers are driven into ships on ramps instead of being crane loaded and some trailers need to drive up sloping driveways during normal operations. Some trailers may have the rear axle further forward to improve maneuverability of the trailer. NHTSA believes that, for such trailers, rear impact guards that are lower than 560 mm (22 inches) may scrape and snag with the ground and get damaged.

c. Types of Heavy Vehicles Excluded From FMVSS No. 224

IIHS requests that NHTSA evaluate whether FMVSS No. 224 can be applied to more vehicles. IIHS states that more than half of the truck units in the LTCCS cases studied by IIHS were excluded from FMVSS No. 224 requirements. IIHS stated that wheels back trailers and SUTs were most of the excluded vehicles. The Karth/TSC petition requests that NHTSA improve the rear impact protection provided by SUTs, a vehicle class currently excluded from FMVSS No. 224. FMVSS No. 224 does not apply to pole trailers, pulpwood trailers, wheels back vehicles, low chassis vehicles, road construction controlled horizontal discharger trailers,[41] special purpose vehicles,[42] or temporary living quarters as defined in 49 CFR 529.2.[43]

The issue of exclusions from FMVSS No. 224 was discussed in detail in the January 24, 1996 final rule and in subsequent final rules. Pole and pulpwood trailers lack structure in the rear for attaching rear impact guards and carry loads likely to substantially overhang the rear of the trailer. This attribute of pole and pulpwood trailers thereby negates the value of rear impact guards and consequently were excluded from FMVSS No. 224 requirements. Wheels back vehicles were excluded because the agency's testing indicated that the rear wheels of wheels back trailers were able to prevent PCI into the impacting passenger car and also were adequate for managing the energy in such a crash.

Trailers with equipment in the rear, such as a lift gate, were excluded from FMVSS No. 224 because of the complexities associated with the installation of rear impact guards on these trailers, and because rear impact guards could interfere with the operation of some lift gates. There are practical problems to installing rear impact guards on trailers with equipment in the rear if the equipment resides at the location where the guard would be installed or if the guard interferes with the operation of the equipment. Thus, NHTSA excluded trailers with equipment in the rear which reside in or moves through any portion of the space designated for a rear impact guard.

Agency Decision [44]

To evaluate whether the exclusions in FMVSS No. 224 should be rescinded, the agency analyzed the supplemental data on rear geometry of trailers that UMTRI collected as part of 2008 and 2009 TIFA survey.[45] UMTRI collected specific data on the rear extremity of trailers and determined whether a rear impact guard was required, and if not required, what type of exclusion criterion was met. UMTRI also collected detailed information on fatal vehicle crashes into the rear of trailers and the extent of underride in these crashes.

For the combined 2008 and 2009 TIFA data (all fatal crashes involving trucks in 2008 and 2009), UMTRI estimated that 66.4 percent of trailers require rear impact guards per FMVSS No. 224 (see Table 6). Among the 33.6 percent of trailers not requiring rear impact guards per FMVSS No. 224, 5.4 percent were types such as pole and logging trailers, 26.4 percent were wheels back trailers, 0.5 percent were low chassis trailers, and 1.2 percent had equipment in the rear.

TABLE 6—REAR IMPACT GUARD STATUS PER FMVSS NO. 224 FOR TRAILERS; TIFA 2008 AND 2009

	Guard required	Guard not required				
		Excluded type	Low chassis	Wheels back	Wheels back + low chassis	Equipment in rear
Trailer	66.4%	5.4%	0.5%	26.4%	0.1%	1.2%

As shown in Table 7, among 217 light vehicle fatal crashes into the rear of trailers that occur annually, 115 are into trailers with guards, 15 are into excluded trailers (equipment in rear, low chassis, pole, pulpwood trailers), 44 are into wheels back trailers, and 43 are into other trailer types. Among 90 fatal light vehicle impact into the rear of trailers that result in PCI, 62 are into trailers with guards, 4 are into excluded trailers (equipment in rear, low chassis, pole, pulpwood trailers), 7 are into wheels back trailers, and 17 involve other truck/trailer types.

[41] A road construction controlled horizontal discharge trailer is a trailer or semitrailer that is equipped with a mechanical drive and a conveyor to deliver asphalt and other road building materials for road construction operations.

[42] Special purpose vehicle is a trailer or semitrailer that has work performing equipment that resides in or moves through any portion of the area that is designated for the rear impact guard. Typically, trailers with equipment in the rear, such as lift gages, are categorized as special purpose vehicles and are excluded from the application of FMVSS No. 224.

[43] In addition, certain cargo tankers certified to carry hazardous materials with a bumper or device in the area where the horizontal member of a guard would be are excluded from having to comply with the energy absorption requirement of FMVSS No. 224.

[44] The ANPRM that was published prior to this NPRM discusses issues relating to applying FMVSS No. 224 to SUTs. Those issues will not be discussed in this NPRM.

[45] Heavy-Vehicle Crash Data Collection and Analysis to Characterize Rear and Side Underride and Front Override in Fatal Truck Crashes, DOT HS 811 725, March 2013.

TABLE 7—ANNUAL FATAL LIGHT VEHICLE IMPACTS INTO THE REAR OF TRAILERS BY TRAILER CONFIGURATION AND WHETHER PCI OCCURRED

Trailer configuration	Fatal light vehicle crashes into the rear of trailers		Fatal light vehicle crashes into the rear of trailers with PCI		Percentage of fatal light vehicle crashes into the rear of trailers resulting in PCI
	Number	Percent	Number	Percent	
Trailer+guard	115	53	62	69	54
Trailer Excluded	15	7	4	4	27
Wheelsback	44	20	7	8	16
Other unknown	43	20	17	19	40
Total	217		90		41

While 20 percent of fatal light vehicle impacts into the rear of trailers are wheels back trailers, they only represent 8 percent of those fatal crashes with PCI into the rear of trucks and trailers. Additionally, only 16 percent of fatal light vehicle impacts into wheels back trailers resulted in PCI, while 54 percent of fatal light vehicle impacts into trailers with guards resulted in PCI. Excluded trailers (equipment in rear, pole, pulpwood, and low chassis trailers) only represent 4 percent of fatal light vehicle crashes into the rear of trailers with PCI. These statistics suggest that the exclusion of pole, logging, low chassis, and wheels back trailers and trailers with equipment in rear from FMVSS No. 224 requirements may not have significant safety consequence.

To better understand the circumstances resulting in PCI and fatality in light vehicle impacts into the rear of wheels back trailers, NHTSA reviewed the available details of all fatal light vehicle impacts into the rear of wheels back trailers that resulted in PCI in the 2009 TIFA data files, as supplemented with trailer and crash information. UMTRI defined PCI as vehicle front end deformation extending up to and beyond the windshield. The results of the review are presented in Table 8. The data shows that there were 6 light vehicle fatal crashes into the rear of wheels back trailers resulting in PCI in 2009. Of these, 4 impacts were at crash speeds greater than 80 km/h (50 mph), which are exceedingly severe.

The relative crash speeds were not known in the other two crashes. One was an impact of a Ford pickup which, with its high ride height construction, was not likely to underride the trailer. A review of this crash suggests that high crash speeds may have been the cause of PCI (defined by UMTRI as the deformation of the vehicle's front end extending up to and beyond the windshield) in the Ford pickup rather than underride of the pickup into the rear of a trailer. The other crash was a 1990 Buick Electra, a large sedan, impacting the rear of a wheels back van trailer. The Electra was traveling in a 55 mph speed zone and so may have also been in a high speed crash.

This analysis suggests that the available data support the exclusion of wheels back trailers in FMVSS No. 224. The analysis of the 2009 TIFA data for light vehicle crashes into the rear of wheels back trailers indicates that the crashes were generally at very high impact speeds that are considered unsurvivable. In all these crashes, it is unlikely that a rear impact guard designed to CMVSS No. 223 would have prevented PCI into these vehicles. Therefore, we do not believe that a rear impact guard would have prevented these fatalities. The agency is not proposing to extend the applicability of FMVSS No. 224 to wheels back trailers.

Table 8: All fatal crashes in 2009 of light vehicles into the rear of MY 1998 and newer wheels back trailers resulting in PCI in the light vehicle – 2009 TIFA data files.

2009 TIFA 1998+ Trailers with PCI by Chassis Type Exemption (Wheels Back)								
Crash State	Case Number	Trailer Model Year	Body Type	Belt Use	Speed Limit	Difference in Travel Speeds	Crash narrative	Factors related to fatality
51 (VA)	18	1998	Van	Belted, front air bag deployed	55 mph (89 km/h)	Unknown	47 yr old fatality, left front 1990 Buick Electra into stopped van trailer	Unknown ΔV - 55 mph speed limit zone
6 (CA)	161	1998	Flatbed	Belted, air bag not equipped	55 mph (89 km/h)	55 mph (89 km/h)	20 yr old fatality, right front 1984 Chevrolet Impala traveling 89 km/h (55 mph) into double flatbed turning left	High ΔV
55 (WI)	443	2004	Van	Belted, front air bag deployed	65 mph (105 km/h)	65 mph (105 km/h)	57 yr old fatality, right front 2003 Dodge Caravan traveling 105 km/h (65 mph) into stopped van trailer Offset right front impact of car into left rear of trailer.	High ΔV
18 (IN)	47	2006	Van	Belted, unknown if air bag deployed	50 mph (81 km/h)	Unknown	42 yr old fatality 2002 Ford pickup into stopped trailer	Unknown ΔV Pickup into wheels back - PCI likely due to crash speed
22 (LA)	442	2006	Flatbed	Unbelted, air bag not depolyed	70 mph (113 km/h)	70 mph (113 km/h)	71 yr old fatality, unbelted 1992 Chevrolet Silverado traveling 113 km/h (70 mph) into stopped flatbed	Unbelted High ΔV Elderly
6 (CA)	1235	1996	Flatbed	Right front belted, air bag not deployed; middle and right rear - unbelted and no air bag	55 mph (89 km/h)	70 mph (113 km/h)	17 yr old right front, 31 yr old right rear, and 22 yr old middle rear seat position fatals 2001 Chevrolet Silverado traveling 134 km/h (83 mph) into double flatbed trailer traveling 21 km/h (13 mph) Offset right rear corner impact of trailer.	High ΔV

NHTSA conducted a similar analysis of 2009 TIFA data files of all fatal light vehicle crashes into the rear of pole, logging trailers and with trailers with equipment in the rear. Low chassis, pole, and pulpwood trailers and trailers with equipment in the rear account for 3 percent of fatal light vehicle impacts into the rear of trailers with resulting PCI. Annually there are 4 light vehicle impacts with PCI into the rear of these excluded vehicles.

Detailed analysis of light vehicle crashes into the rear of these excluded vehicles which resulted in PCI of the light vehicle suggest that all these crashes were very severe and that a CMVSS compliant rear impact guard, if present, would not have prevented the fatalities. Additionally, installing rear impact guards on these excluded vehicles is not necessarily feasible or practicable due to the geometry of the rear extremity. Given all the above, the agency is not proposing to remove the exclusion of low chassis, pole, pulpwood trailers, and trailers with equipment in the rear, from FMVSS No. 224.

d. Require Attachment Hardware To Remain Intact

Currently FMVSS No. 223 specifies strength requirements for the guard in terms of the forces that the guard must withstand to prevent PCI and the energy it must absorb to reduce injury to occupants of the impacting vehicle. It does not specify performance requirements relating to the attachment hardware itself of the rear impact guard, *i.e.,* that the guard's attachments must remain attached, etc. IIHS requests that FMVSS No. 223 require that attachment hardware of the rear impact guard remain intact throughout the quasi-static tests.

IIHS suggests that its data demonstrate that simply increasing the overall peak force requirements of FMVSS No. 223 would be insufficient to improve the performance of rear impact guards. IIHS notes that, in its tests, the 2007 Hyundai and the 2007 Vanguard trailer rear impact guards met the quasi-static loads test requirements at the P3

location [46] by substantial margins, despite having attachment bolts that sheared or pulled away from the guard during the test. IIHS states that similar failures of the rear impact guard attachments were also observed in IIHS's 56 km/h (35 mph) crash tests of a MY 2010 Chevrolet Malibu into the rear of the 2007 Hyundai and Vanguard trailers and which resulted in PCI of the Malibu. IIHS states that, in contrast, the 2011 Wabash trailer rear impact guard did not experience any attachment failures during the quasi-static test at the P3 location and performed well in the 56 km/h (35 mph) crash test with the Chevrolet Malibu with no PCI of the Malibu. IIHS states that to encourage intelligent guard designs, FMVSS Nos. 223 and 224 should include a stipulation that all attachment hardware must remain intact for the duration of the test or until reaching a force threshold that is much higher than that required for the guard itself.

IIHS provides further information on this issue in a 2011 paper [47] in which it describes the attachment hardware for the rear impact guards of the 2007 Hyundai, 2007 Vanguard, and the 2011 Wabash trailers that it tested. The 2007 Hyundai guard that was only certified to FMVSS No. 223 requirements, did not have any forward attachments points to the trailer side rails or structure, and the vertical supports of the guard were directly bolted to the lower rear cross-members of the trailer. The 2007 Vanguard rear impact guard that complied with CMVSS No. 223 requirements in addition to that of FMVSS No. 223, had diagonal gussets attached to forward portions of the trailer chassis using bolts that would be loaded in shear in a rear impact. The 2011 Wabash rear impact guard that was certified to CMVSS No. 223 in addition to FMVSS No. 223, had diagonal gussets attached to forward portions of the trailer chassis using bolts that transfer loads from the guard to the chassis through overlapping steel plates.

In the quasi-static load test at the P3 location of the rear impact guards, for the Hyundai guard, the vertical support member slowly pulled out from the bolts attaching it to the fixture. The peak load achieved by the 2007 Vanguard guard was 257,000 N, after which the attachment bolts of the Vanguard guard began to shear after 50 mm of guard displacement, causing the load to drop below 100,000 N. On the other hand, the attachments of the Wabash guard remained intact throughout the test and the vertical member buckled near its attachment.

In the 56 km/h (35 mph) full overlap crash test of the Chevrolet Malibu with full overlap into the rear of the 2007 Hyundai trailer, the attachment bolts ripped from the trailer's rear cross-member resulting in PCI of the Malibu. In the crash test into the rear of the 2007 and the 2013 Vanguard trailer at 50 percent overlap with the guard, the attachments bolts sheared and the right half of the guard completely detached from the trailer resulting in PCI of the Malibu.

Agency Decision

NHTSA sees merit in IIHS's request for requiring the attachment hardware to remain intact in the quasi-static load tests, and is thus granting the request.

The agency tentatively concludes that the IIHS data indicate that a requirement that ensures the integrity of the guard attachments would reduce the likelihood of failure of the anchorages or attachments in real world crashes in crashes up to 56 km/h (35 mph). The IIHS testing showed that the Wabash rear impact guard that exhibited no attachment failure and deformed plastically during the quasi-static load tests, performed well in the 56 km/h (35 mph) crash test with full overlap and 50 percent overlap of the Chevrolet Malibu. Therefore, to maximize the performance potential of the rear impact guard, the agency is proposing to require that any portion of the guard and the guard attachments not completely separate from its mounting structure after completion of the quasi-static uniform distributed load test. The agency reviewed its compliance tests conducted in the past five years and found that no portion of the rear impact guards and their attachments completely separated from the mounting structure.[48]

We are interpreting ''any portion of the guard and the guard attachment completely separating from it mounting structure'' to mean the condition where any member of the guard becomes detached from any other member of the guard or from the trailer such that the joint is no longer mechanically bound together. We would not consider a partial separation of the members at a joint where there is still some degree of mechanical connection between the members as a ''complete separation.'' We seek comment on this proposed performance criterion and whether its objectivity can be improved by, *e.g.*, specifying the percentage of fasteners or welds that remain intact during the test.

e. Testing on a Trailer Rather Than a Fixture

Both FMVSS No. 223 and CMVSS No. 223 provide the option of testing the rear impact guard when attached to a rigid test fixture or when attached to a complete trailer. IIHS states that, to ensure the compliance tests correspond to on-road underride protection, rear impact guards should not be certified separately from the trailers to which they will be attached. IIHS states that several of its crash tests of a 2010 Chevrolet Malibu into the rear of trailers produced deformation to various portions of the trailer, and that this suggests that the total resistance of the guard-attachment-trailer system is lower than that of a guard alone when tested on a rigid fixture. IIHS states that ideally, FMVSS No. 223 should require guards to be certified while attached to complete trailers, and that at a minimum, guards should be tested while attached to sections of the trailer rear that include all the major structural components and that are constrained such that the load paths near the guard are not changed.

Agency Decision

NHTSA is denying the request to remove the option of testing guards on a rigid test fixture. Both FMVSS No. 223 and CMVSS No. 223 provide the option of testing the rear impact guard when attached to a rigid test fixture or when attached to a complete trailer. NHTSA believes the rigid test fixture and complete trailer tests are essentially equivalent. In NHTSA rigid test fixture compliance tests, the rear impact guards contain part of the trailer frame rails and/or cross beams to which the rear impact guard is attached. When testing on a trailer, the trailer chassis is secured so it behaves essentially as a fixed object during the test.

FMVSS No. 223 and CMVSS No. 223 specify that the guard be attached to the test device (rigid test fixture or complete trailer) in accordance with the instruction or procedures for guard attachment provided by the manufacturer. The specification assists in ensuring that the rear impact guard

[46] The 2007 Hyundai rear impact guard was certified and tested to the FMVSS No. 223 load test at the P3 location and the 2007 Vanguard rear impact guard was certified and tested to both the FMVSS No. 223 and CMVSS No. 223 load tests at the P3 location. When displaced to 125 mm, as required in the energy absorption test, IIHS found that the rear impact guard attachments failed. Such failure was not considered a failure to comply with the standards, however.

[47] Brumbelow, M.L., ''Crash Test Performance of Large Truck Rear Underride Guards,'' Paper No. 11–0074. 22nd International Technical Conference on the Enhanced Safety of Vehicles, Washington DC, 2011. *http://www-esv.nhtsa.dot.gov/Proceedings/22/isv7/main.htm.* Last accessed on March 15, 2015.

[48] The agency did not test the rear impact guards of the 2007 Hyundai, 2007 Vanguard, or the 2013 Vanguard trailers.

is evaluated in representative real world-installed conditions.

We do not agree with IIHS's conclusion that, when tested on a trailer, the total resistance of the guard-attachment-trailer system is lower than that of the guard alone on a rigid fixture due to deformation of the trailer structure. We believe that in the crash tests, the trailer structure along with the guard offered resistance to the dynamic loads and that is why the trailer structure also deformed.

We believe that testing a rear impact guard when attached to the rigid structure could be more stringent than when testing the guard while attached to the trailer. If the trailer structure is resisting a portion of the load as noted by IIHS, testing a guard on a rigid fixture may result in a more stringent test than testing it when attached to the trailer. When the guard is attached to a rigid fixture, it has to resist all the loads and absorb all the energy, whereas when it is installed on a trailer, the designs could be such that the trailer structure could resist a portion of the load.

NHTSA is also denying the request because requiring that the guard be tested when attached to the trailer would be a significant cost burden to trailer manufacturers. Trailer manufacturers typically design and fabricate their own guards in conjunction with the rest of the vehicle. Trailer manufacturers typically test rear impact guards when attached to components of the trailer such as the frame rails and/or the cross member, similar to NHTSA's compliance testing program. Though the trailer manufacturers have access to their trailers for testing, it is expensive to conduct a full trailer test, which is a destructive test, and so they do not conduct the FMVSS No. 223 specified quasi-static tests when the guard is attached to the full trailer.

Requiring that the guard be tested when attached to the trailer would be an unnecessary and significant cost burden for the manufacturers, especially for small trailer manufacturers with low sales volumes. If those manufacturers were to test the guard on the trailer, this testing would entail sacrificing what could be a large part of their overall trailer production for such testing. Additionally, NHTSA also acknowledges there are a few rear impact guard manufacturers who are not trailer manufacturers (some of which are small businesses), and a requirement that the guard be tested when installed on the trailer could substantially and unnecessarily impact these entities.

For the reasons stated above, NHTSA believes it is beneficial to retain the current option of testing rear impact guards when attached either to a rigid test fixture or a trailer to ensure flexibility in testing capability. The agency's position is consistent with CMVSS No. 223 and with the test methods used for verifying compliance to the Canadian standard.

f. Moving P1 More Outboard

FMVSS No. 223 and CMVSS No. 223 specify that the P1 test location is at a distance from the centerline of the horizontal member of 3/8th of the width of the horizontal member, the P2 test location is at the centerline of the horizontal member, and the P3 test location is 355 mm (14 inches) to 635 mm (25 inches) from the horizontal member centerline (see Figure 1 of this preamble, supra).

IIHS requests that NHTSA evaluate relocating the quasi-static point load test at the P_1 location further outboard toward the end of the guard horizontal member. IIHS states that the crash tests of the 2010 Chevrolet Malibu into the rear of the 2011 Wabash trailer with full, 50 percent, and 30 percent overlap of the Malibu front end show that the CMVSS No. 223 certified guards prevented underride in the full and 50 percent overlap crashes by transferring the crash loads to stiff portions of the trailer chassis. IIHS suggests that, to extend the same level of underride protection to 30 percent overlap crashes, the test at the P1 location should be moved farther outboard, as well as subjected to a higher force requirement. (IIHS did not specify a specific location for P1 nor did it specify a specific force level for the test.) IIHS believes that on many trailers, the strong side rails would provide an acceptable location for attaching a guard to protect against underride in small engagement crashes.

The Karth/TSC petition requests that the agency improve the safety of rear impact guards on trailers in low overlap crashes by specifying the guard vertical supports be located 457 mm (18 inches) from the ''outer edges.'' (It is not clear from the petition whether the ''outer edges'' refers to the outer edge of the rear impact guard horizontal member or that of the trailer body. NHTSA assumes ''outer edges'' refers to the lateral edges of the trailer.) Figure 2 shows where we believe the petition suggests placing the guard supports.

The width of a typical trailer is 2,600 mm (102 inches) and so the width of the horizontal member of the rear impact guard for the typical trailer is 2,400 mm (94.5 inches). For such a guard, the location of P1, P2 and P3, and the average location of the vertical attachments, are shown in Figure 2.

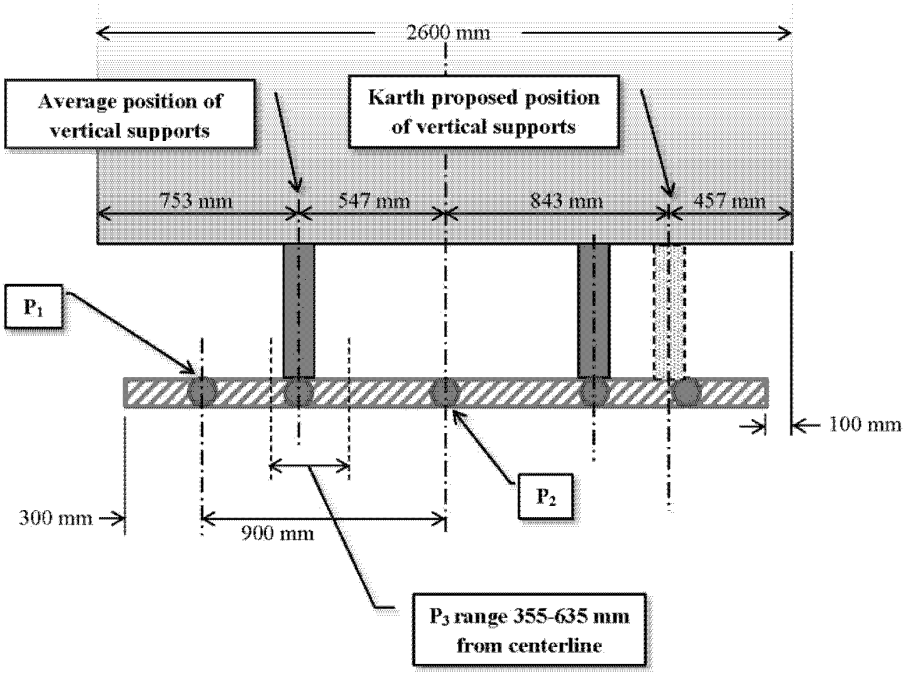


Figure 2: Rear impact guard geometry of a typical rear impact guard installed on a 2600 mm wide trailer along with the test locations P1, P2, and P3. (Drawing not to scale)

In this configuration, P1 is 400 mm (16 inches) from the lateral edge of the trailer and the centerline of the vertical support is 753 mm (30 inches) from the lateral edge of the trailer.

Agency Decision

NHTSA is not proposing to move the P1 location farther outboard. The P1 location is about 300 mm (12 inches) from the lateral edge for typical rear impact guards. NHTSA is concerned that moving the P1 location would not benefit safety overall.

First, NHTSA's analysis of field data found that underride crashes of 30 percent or less appear to represent a small portion of the rear underride fatality problem. The agency reviewed the UMTRI special study of 2008 and 2009 TIFA data to evaluate the requested amendment. UMTRI defined ''offset crashes'' as impacts with the outer one-third or less of the rear plane of the truck or trailer. (For a 2,600 mm wide trailer, one third of the trailer width is 867 mm from the lateral edge of the trailer. As shown in Figure 2, the vertical members are typically 753 mm from the lateral edge of the trailer.)

The study found that most underride crashes into the rear of trailers are not offset impacts. UMTRI found that 40 percent of light vehicle impacts into the rear end of trucks and trailers in fatal crashes met the UMTRI definition of ''offset crashes,'' [49] and that 60 percent were non-offset impacts.[50] Moreover, the non-offset crashes appear to be more destructive (potentially harmful) than offset crashes. UMTRI noted that only 38.7 percent of light vehicle offset impacts into rear guards resulted in major damage to the guard, while almost half of the light vehicle non-offset impacts into rear guards resulted in major damage to the guard, including tearing it off. UMTRI also found for trailers with rear impact guards, there was virtually no difference in the percentage of light vehicle crashes with PCI in offset crashes (53.3 percent) and non-offset crashes (51.9 percent) as shown in Table 9.

[49] UMTRI defined ''offset crashes'' as impacts with the outer one-third or less of the rear plane of the trailer. For a 2,600 mm wide trailer, one-third of the trailer width is 867 mm from the lateral edge of the trailer.

[50] Heavy-Vehicle Crash Data Collection and Analysis to Characterize Rear and Side Underride and Front Override in Fatal Truck Crashes, DOT HS 811 725, March 2013.

TABLE 9—UNDERRIDE EXTENT IN LIGHT VEHICLE FATAL CRASHES INTO THE REAR OF TRAILERS WITH REAR IMPACT GUARDS, BY WHETHER THE IMPACT WAS ''OFFSET'' OR NOT

[TIFA 2008 and 2009]

Impact Type	Underride Extent [51] (percentage of light vehicle rear impacts into trailers)				
	N	None	Less than halfway	Halfway+	Windshield+
Offset	105	17.1	14.3	15.2	53.3
Non-Offset	135	18.5	14.1	15.6	51.9

Given that the majority of fatal light vehicle crashes into the rear of trucks and trailer were non-offset crashes, the percentage of light vehicle crashes with major rear impact guard damage is greater in non-offset crashes than in offset crashes, and that there was virtually no difference in the percentage of light vehicle crashes with PCI in offset crashes and in non-offset crashes, NHTSA believes that the performance of rear impact guards in the fleet [52] in non-offset crashes should be enhanced before turning to the issue of improving the performance of the guards in offset crashes.

IIHS conducted 56 km/h crash tests of the 2010 Chevrolet Malibu into the rear of trailers with full, 50 percent, and 30 percent overlap of the Malibu front end with the rear impact guard. (The width of the Chevrolet Malibu is 1790 mm. Therefore, 50 percent overlap is 995 (=1790 × 0.5 +100 [53]) mm from the rear lateral edge of the trailer and 30 percent overlap is 637 (=1790 × 0.3+100) mm from the rear lateral edge of the trailer.) See Figure 3. Since the vertical supports of a typical trailer are located 753 mm from the lateral edge of the trailer, we calculate that the vertical supports are engaged in crashes with 50 percent overlap of the Malibu but not in 30 percent overlap crashes. The percentage of light vehicle rear impacts with only 30 percent overlap with the rear impact guard (with the Malibu this would be 637 mm from the lateral edge of the trailer or 25 percent of the rear of the trailer engaged) would likely be a small percentage of rear impact crashes into trailers.[54]

[51] ''None'' means no underride, ''Less than halfway'' means underride extent of less than halfway up the hood, ''Halfway+'' means underride extent at or more than halfway up the hood but short of the base of the windshield and ''Windshield+'' means intrusion at or beyond the base of the windshield. This is also considered PCI.

[52] The 2013 UMTRI study was conducted using 2008 and 2009 TIFA data files. The rear impact guards of the 2008–2009 trailers fleet were mainly FMVSS No. 223 certified and some (pre-1998 models) were FMCSR 393.86(b) certified.

[53] 100 mm is the maximum allowable distance between lateral edge of the rear impact guard and the lateral edge of the trailer per FMVSS No. 224.

[54] The UMTRI study of 2008–2009 TIFA data files indicated that light vehicle offset crashes into the rear of trailers (about 867 mm from the edge of a 2,600 mm width trailer engaged) is about 40 percent of all light vehicle crashes into the rear of trailers. Therefore, crashes with 25 percent of the trailer (637 mm for a 2,600 mm width trailer) would represent a significantly lower percentage of light vehicle crashes into the rear of trailers.

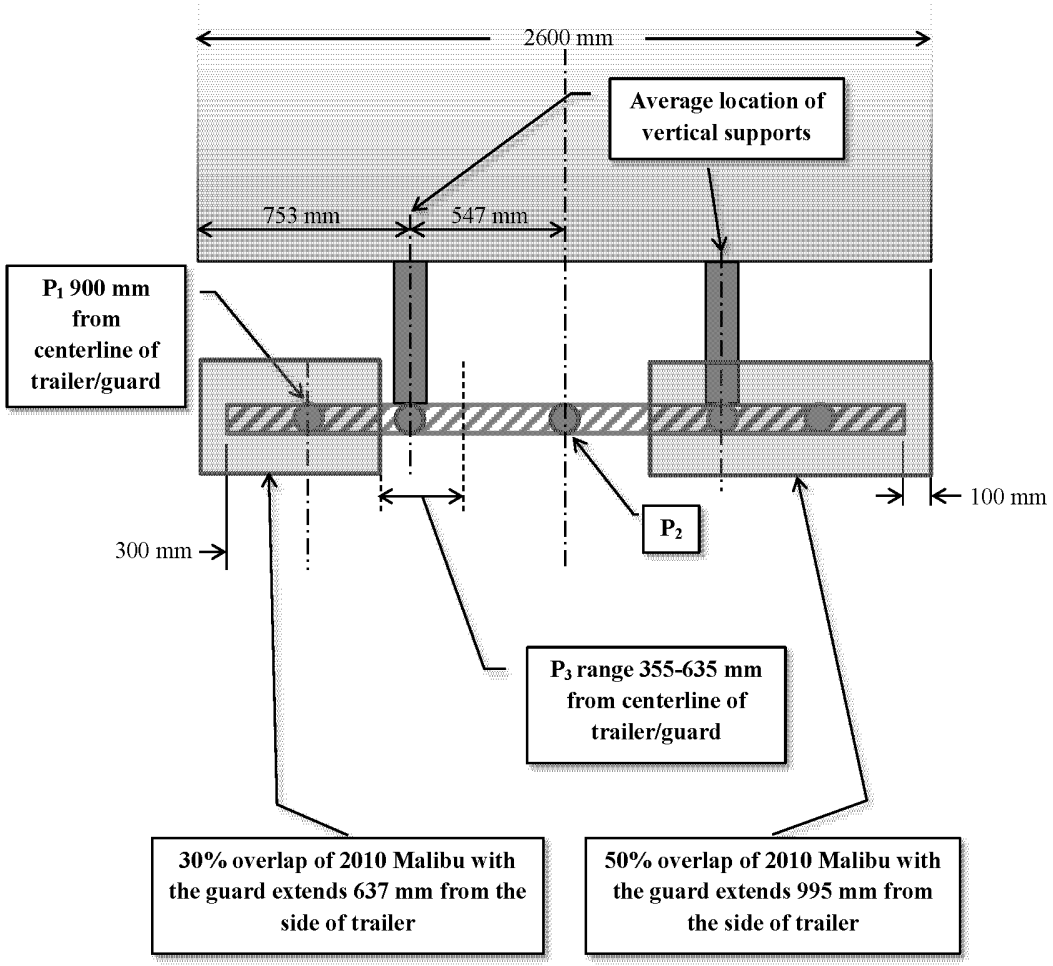


Figure 3: Diagram illustrating 50 and 30 percent overlap collision into a typical trailer as defined in the IIHS tests. (Drawing not to scale)

Second, we are concerned that moving the P1 location would not benefit safety overall. A comparison of the rear impact guard performance of the Manac trailer and the Wabash trailer in the IIHS crash tests of the Malibu indicate that moving the vertical supports towards the lateral edges of the trailer, as with the Manac guard, does show improved performance in the 30 percent overlap crash in the IIHS test. However, moving the supports may reduce the performance of rear impact guards in preventing PCI in the more common 50 and 100 percent overlap crashes at higher speeds.

In the crash tests conducted by IIHS, the Manac rear impact guard was able to prevent PCI in the Chevy Malibu in the 56 km/h (35 mph) 30 percent overlap condition. Manac attaches the main vertical supports outside of the axle rails. It fastens the guard to a reinforced floor section. Moving the vertical supports further outboard as requested by the petitioners may improve rear impact protection in small overlap crashes of light vehicles into the rear of trailers, but mounting the vertical supports further outboard may reduce guard strength near the center of the horizontal member of the rear impact guard. In the 56 km/h (35 mph) full overlap crash tests of the Malibu, the greatest amount of underride (1,350 mm) was in the test with the Manac trailer. In contrast, the extent of the underride was 990 mm in the test with the Wabash trailer.

The Manac rear impact guard prevented PCI in 56 km/h (35 mph) crash tests with full overlap, 50 percent and 30 percent overlap of the Malibu. However, the full overlap crash test results indicate that trailers that have the main vertical supports for the guard more outboard may not perform as well in full overlap crashes as trailers that have the vertical supports more inboard for crash speeds greater than 56 km/h (35 mph). Since full and 50 percent overlap crashes are more frequent than low overlap (30 percent or less) crashes, and since most fatal light vehicle impacts into the rear of trailers are at speeds greater than 56 km/h (35 mph), such guard designs may reduce protection against PCI in higher speed full and 50 percent overlap crashes. It has not been shown that protection in the 30 percent overlap crashes can be provided without degrading protection in the 50 and 100 percent overlap crashes. NHTSA is not convinced that improved protection in the less frequent 30 percent overlap crashes should come at the cost of adequate protection in the more common 50 and 100 percent overlap crashes.

In addition, the suggested amendment to move the vertical supports more outboard may not be practical for different trailer types. Typically, the vertical supports of rear impact guards are attached to the longitudinal members of the trailer frame that have sufficient strength to withstand loads transferred from the guard in the event of a rear impact. Moving the vertical supports further outboard would require changes to trailer designs so that in a

rear impact, the loads from the guard can be transferred to substantially strong structural members of the trailer. Such changes in trailer design may add weight to the trailer, reduce payload, and may not be practicable for all trailer types.

IIHS suggested moving the P1 test location further outboard or increasing the load in the quasi-static test at P1. However, IIHS did not provide specifics on this request. As shown in Figure 2, the P1 test location is about 300 mm (12 inches) from the edge of a typical trailer rear impact guard. It is not clear how moving the P1 location further outboard or increasing the load in the quasi-static test would improve guard performance in 56 km/h 30 percent overlap crashes and what impact that would have on crashes with a full or 50 percent overlap.

VI. Definition of ''Rear Extremity'' To Accommodate Aerodynamic Devices on Trailers

Aerodynamic fairings on the rear of trailers, also known as ''boat tails,'' are rear-mounted panels on trailers that reduce aerodynamic drag and fuel consumption. Boat tails generally extend several feet beyond the end of the trailer.[55] Some boat tails protrude so far rearward that they could strike the passenger compartment of a vehicle that impacts the trailer from the rear, notwithstanding the presence of an upgraded underride guard.

Currently, there is some ambiguity in FMVSS No. 224 as to how boat tails are covered under the standard. FMVSS No. 224 (S5.1.3) requires rear impact guards to be located at a maximum distance of 305 mm (12 inches) forward of the ''rear extremity'' of the trailer. One question is whether a boat tail on a new trailer constitutes the ''rear extremity'' of the vehicle. If it constitutes the rear extremity of the vehicle, the underride guard must be positioned no further than 305 mm (12 inches) forward of the boat tail. Another question is if the features and design of the aerodynamic device matter as to whether it should be considered the rear extremity of the vehicle.

We propose amending FMVSS No. 224 to answer those questions and make clearer its regulation of trailers with boat tails. We are proposing to achieve this by replacing the current definition of ''rear extremity'' in FMVSS No. 224 with that specified in CMVSS No. 223. The amendment would better ensure that boat tails are located within a certain safe zone at the rear of the trailer, and have features that are beneficial to crash protection.

In 2008, CMVSS No. 223 had the same definition of ''rear extremity'' as FMVSS No. 224, and Transport Canada had challenges similar to ours regarding boat tails. Transport Canada contracted the Centre for Surface Transportation Technology of the National Research Council (NRC) in Canada to study the aerodynamic gains of boat tails and determine which types of vehicles and what percentage of vehicles on the Canadian roads would strike the boat tail before striking the rear underride guard of trailers. NRC also examined the effect of snow, ice, and debris accumulation by boat tails, as well as downstream visibility.

NRC conducted wind tunnel experiments with different lengths, heights, and shapes of aerodynamic rear-mounted trailer panels (boat tails) to assess their drag reduction capability. Collision risk analysis with boat tails was conducted using dimensional data and population data of motor vehicles registered in Canada. The NRC also developed computational fluid dynamics models to evaluate visibility and particulate accumulation.

The NRC report was published in December 2010.[56] The main findings of the NRC study are as follows:

- *Reduction in drag and fuel consumption:* The boat tails reduced aerodynamic drag by 7.6 to 11.8 percent when the vehicle is operating at 65 mph. This corresponds to an estimated 4.7 to 7.3 percent reduction in fuel consumption.
- *Length of boat tails:* The most significant aerodynamic drag reduction occurred for boat tail lengths from 0 to 2 feet. For boat tails longer than 2 feet, there is further drag reduction, but only incrementally. Boat tails longer than 4 feet offered minimal or no additional reduction in drag compared to shorter boat tails.
- *Height of boat tails:* Boat tails were most effective if at least 75 percent of the height of the trailer has full length boat tails. For most trailers, this corresponds to having full length boat tails at heights above 1,800 mm from the ground.
- *Boat tail length and shape at lower heights:* Although full length side panel boat tails that extend the entire height of the trailer offered the best reduction in drag, nearly the same level of drag reduction could be achieved by less. However, it was found that there should be at least some boat tail structure at the lower part of the trailer, even if it is significantly shorter than the higher section of the boat tail. The complete absence of boat tail structure at the bottom of the trailer significantly reduced the effectiveness of the boat tails.
- *Boat tail bottom panel:* The presence of the bottom panel was found to be more critical than the length of the side panels for drag reduction. As much as 20 percent of the aerodynamic drag reduction was from the bottom panel.
- *Visibility and particulate material:* Both 2 feet and 4 feet boat tail lengths provided a significant improvement in reduced turbulence downstream of the trailer. However, there was a risk of particulate accumulation (snow and ice) on the bottom panel of boat tails.
- *Collision Risk:*
  - If 4 foot long boat tails are fitted to trailers along their entire height, 33.6 percent of vehicles on Canadian roads would strike the boat tail before striking the rear impact underride guard, however many of these contacts with the boat tail could be to the grille/hood rather than the windshield.
  - In order to prevent at least 90 percent of the vehicles on the roads from initial boat tail strikes, the full length boat tails (1,219 mm (4 feet)) should be mounted on the trailer higher than 1,740 mm (68 inches) from the ground.
  - There are boat tail configurations that provide up to a 9 percent reduction in aerodynamic drag and less than a 15% risk of collision before striking the underride guard. These configurations have shorter boat tail lengths (610 mm (2 feet)) at heights below 1,740 mm (68 inches) above ground.

Following the completion of the NRC of Canada study, Transport Canada undertook rulemaking to develop a clearance zone to allow aerodynamic devices (boat tails) that, in a collision, would not reduce safety for occupants of vehicles which may strike the rear of

[55] The Federal Highway Administration's (FHWA's) regulation 23 CFR part 658, ''Truck size and weight, route designations,'' limits the length, width, and weight of trailers for purposes of ensuring the highways can safely and efficiently accommodate large vehicles. 23 CFR 658.16, ''Exclusions from length and width determinations,'' excludes aerodynamic devices that extend a maximum of 1,524 mm (5 feet) beyond the rear of the vehicle from either the measured length or width of a trailer. (Also, among other things, the aerodynamic devices must ''have neither the strength, rigidity nor mass to damage a vehicle, or injure a passenger in a vehicle, that strikes a trailer so equipped from the rear, and provided also that they do not obscure tail lamps, turn signals, marker lamps, identification lamps, or any other required safety devices, such as hazardous materials placards or conspicuity markings. *Id.*) This regulation has the effect of limiting aerodynamic devices to 1,524 mm (5 feet)) when deployed.

[56] ''Trailer Boat Tail Aerodynamic and Collision Study, Technical Report,'' National Research Council, Canada, Project 54–A3871, CSTT–HVC–TR–169, December 2010.

a trailer.[57] The regulation, finalized on August 8, 2011, modified the definition of ''rear extremity'' of the trailer (which was similar to that currently specified in FMVSS No. 224) to read as follows:

''Rear extremity'' means the rearmost point on a trailer that is above a horizontal plane located above the ground clearance and below a horizontal plane located 1,900 mm above the ground when the trailer is configured as specified in subsection (7) and when the trailer's cargo doors, tailgate and other permanent structures are positioned as they normally are when the trailer is in motion. However, nonstructural protrusions, including but not limited to the following, are excluded from the determination of the rearmost point:

(a) tail lamps;
(b) rubber bumpers;
(c) hinges and latches; and
(d) flexible aerodynamic devices that are capable of being folded to within 305 mm from the transverse vertical plane tangent to the rearmost surface of the horizontal member and that, while positioned as they normally are when the trailer is in motion, are located forward of the transverse plane that is tangent to the rear bottom edge of the horizontal member and that intersects a point located 1,210 mm rearward of the rearmost surface of the horizontal member and 1,740 mm above the ground.

Based on this language, the permitted zone for boat tails at the rear of trailers is as shown in Figure 4, below.[58] The reference to ''subsection (7)'' in the Transport Canada regulation set forth above means the trailer is resting on level ground, unloaded, with its full capacity of fuel, its tires inflated and its air suspension, if so equipped, pressurized in accordance with the manufacturer's recommendations.

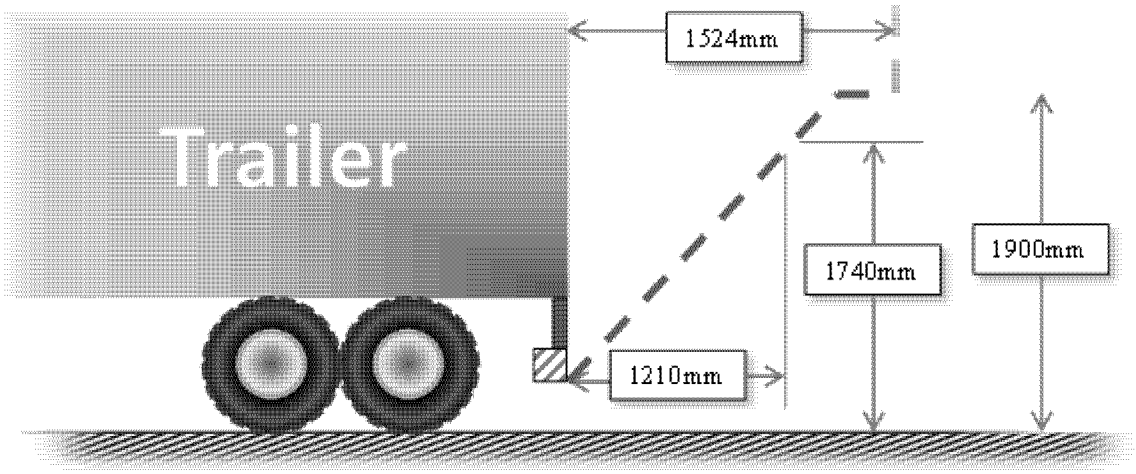


Figure 4: Permissible zone for locating aerodynamic devices per CMVSS rear extremity definition. (Drawing not to scale)

NHTSA is proposing to revise the definition of rear extremity in FMVSS No. 224 to adopt that of Transport Canada, so as to define a zone in which aerodynamic devices (boat tails) may be placed where, in a collision, they would not reduce the safety of occupants of vehicles striking the rear of a trailer. The agency expects that there will be an increased use of aerodynamic devices in the rear of trailers in the coming years for fuel efficiency purposes. NHTSA intends this proposal to address the installation of aerodynamic devices on trailers and to harmonize with the requirements of Transport Canada. Comments are requested on the proposed amendment.

VII. Cost and Benefits Analysis

NHTSA has prepared a Preliminary Regulatory Evaluation (PRE) for this NPRM and has placed a copy of the PRE in the docket.

For estimating the benefits of requiring applicable trailers to be equipped with CMVSS No. 223 certified guards, NHTSA estimated the annual number of fatalities in light vehicle crashes with PCI into the rear of trailers. NHTSA only considered fatal crashes with PCI for the target population because the IIHS test data presented in Appendix A of this preamble show that when PCI was prevented, the dummy injury measures were significantly below the injury assessment reference values of NHTSA's occupant crash protection standard, and are likely similar to values in crashes into the rear of passenger vehicles. In non-PCI crashes into the rear of trailers, the IIHS test data indicate that the passenger vehicle's restraint system, when used, would mitigate injury. Therefore, non-PCI crashes were not considered as part of the target population for estimating benefits.

Annually, there are 72 light vehicle occupant fatalities in crashes into the rear of trailers with rear impact guards with PCI. About 26 percent of fatal light vehicle crashes into the rear of trailers is at speeds 56 km/h (35 mph) or less. The agency estimates that 19 fatalities (=72 × 0.26) are in crashes with relative velocity of 56 km/h (35 mph) or less. CMVSS No. 223 guards may not be able to mitigate all fatalities in crashes into the rear of trailers with relative velocity of 56 km/h or less because some crashes may involve low overlap (30 percent or less) and some fatalities may be due to circumstances other than underride (*i.e.* unrestrained status of occupants, elderly and other vulnerable occupants). For the purpose of this analysis, NHTSA assumed that the incremental

[57] Transport Canada consulted with NHTSA on its rulemaking before it issued its proposal on a revised definition of rear extremity of a trailer.

[58] The maximum length of aerodynamic devices of 1,542 mm (5 feet), specified in 23 CFR 658.16, ''Exclusions from length and width determinations,'' applies at heights above 1900 mm from ground level, as shown in Figure 4.

effectiveness of CMVSS No. 223 compliant guards over FMVSS No. 223 compliant guards in preventing fatalities in light vehicle impacts with PCI into the rear of trailers with crash speeds less than 56 km/h is 50 percent. Since only 26 percent of light vehicle crashes with PCI into the rear of trailers are at relative velocity less than or equal to 56 km/h, NHTSA estimated the overall effectiveness of upgrading to CMVSS No. 223 compliant guards to be 13 percent (=26% × 50%).

The target population of fatalities considered is representative of fatalities occurring in light vehicle crashes into the rear of trailers that result in PCI. As noted above, in estimating benefits, the agency assumed that the upgraded rear impact guards would mitigate fatalities and injuries in light vehicle impacts with PCI into the rear of trailers at impact speeds up to 56 km/h (35 mph), since the requirements of CMVSS No. 223 are intended to prevent PCI in impacts with speeds up to 56 km/h (35 mph). We recognize, however, that benefits may accrue from underride crashes at speeds higher than 56 km/h (35 mph), if, *e.g.,* a vehicle's guard exceeded the minimum performance requirements of the FMVSS. NHTSA requests information that would assist the agency in quantifying the possible benefits of CMVSS No. 223 rear impact guards in crashes with speeds higher than 56 km/h (35 mph).

We note also that, while CMVSS No. 223 requirements are intended for mitigating PCI in light vehicle rear impacts at speeds less than or equal to 56 km/h (35 mph),[59] CMVSS No. 223 certified rear impact guards may not be able to mitigate all fatalities in such crashes because some of the crashes may be low overlap (30 percent or less) [60] and because some fatalities are not as a result of PCI but are due to other circumstances (*e.g.* unrestrained status of occupants, elderly occupants) in which improved rear impact guards may not have prevented the fatalities.

The agency estimates that 93 percent of new trailers are already equipped with CMVSS No. 223 compliant guards. Assuming 13 percent effectiveness of these guards in fatal crashes with PCI into the rear of trailers, the agency estimates that about 0.66 (= 72 × (1–0.93) × 0.13) lives would be saved annually by requiring all applicable trailers to be equipped with CMVSS No. 223 compliant guards. The agency also estimated that a total of 2.7 serious injuries would be prevented annually with the proposed underride guard rule. The equivalent lives saved were estimated to be 1.1 and 1 lives discounted at 3 percent and 7 percent, respectively.

NHTSA conducted a study to develop cost and weight estimates for rear impact guards on heavy trailers.[61] In this study, the agency estimated the cost and weight of FMCSR 393.86(b) compliant rear impact guards, FMVSS No. 223 compliant rear impact guards, and CMVSS No. 223 compliant rear impact guards (Table 10). All costs are presented in 2013 dollars.

In estimating the cost and weight of guards in this study, an engineering analysis of the guard system for each trailer was conducted, including material composition, manufacturing and construction methods and processes, component size, and attachment methods. However, the researchers did not take into account the construction, costs, and weight changes in the trailer structure in order to withstand loads from the stronger guards. A limitation of this analysis is the fact that the authors did not evaluate the changes in design of the rear beam, frame rails, and floor of the trailer when replacing a rear impact guard compliant with FMCSR 393.86(b) with an FMVSS No. 224 compliant guard and then to a CMVSS No. 223 compliant guard.

TABLE 10—COST (2013 DOLLARS) AND WEIGHT OF DIFFERENT TYPES OF REAR IMPACT GUARDS

Type of rear impact guard	Trailer model year/make	Guard assembly	Installation cost	Total cost	Weight (lb)
FMCSR 393.86(b)	1993 Great Dane	$65.31	$41.92	$107.23	78
FMVSS No. 224	2001 Great Dane	153.22	109.75	262.86	172
	2012 Great Dane	191.17	153.25	344.05	193
CMVSS No. 223	2012 Manac	302.05	248.74	550.08	307
	2012 Stoughton	248.02	222.37	470.91	191
	2012 Wabash	447.05	155.21	601.84	243

The average cost of a Canadian compliant rear impact guard is $492, which is $229 more than an FMVSS No. 224 compliant guard. The incremental cost of equipping CMVSS No. 223 compliant rear impact guards on applicable new trailers (those that are subject to FMVSS No. 223) is $229. There are 243,873 trailers sold in 2013,[62] among which 65 percent (see Appendix A to this preamble, Table A–1) are required to be equipped with rear impact guards. Of those, 93 percent are already equipped with CMVSS No. 223 compliant guards. The annual incremental fleet cost of equipping all applicable trailers with CMVSS No. 223 rear impact guards is approximately $2.5 million (= 243,873 × 0.65 × (1.0–0.93) × $229).

As shown in Table 10, upgrading from the FMVSS No. 224 compliant guard to the CMVSS No. 223 compliant guard would add an average incremental weight of 48.9 lb to the trailer, thereby reducing the overall fuel economy during the lifetime of the trailer. The incremental increase in lifetime fuel cost for a 48.9 lb weight increase of a trailer was estimated to be $1,042.2 and $927.7 discounted at 3 percent and 7 percent, respectively. The annual incremental lifetime fuel cost of equipping all applicable trailers with CMVSS No. 223 rear impact guards is $9.2 million and $8.2 million discounted at 3 percent and 7 percent, respectively. Therefore the total cost of the proposed rule, including material and fuel costs is $11.77 million discounted at 3 percent and $10.76 million discounted at 7 percent (Table 11).

[59] Transport Canada testing of minimally compliant CMVSS No. 223 rear impact guards indicated that such guards could prevent PCI in light vehicle impacts with full overlap with the guard at crash speeds up to 56 km/h (35 mph). See Boucher D., Davis D., ''Trailer Underride Protection—A Canadian Perspective,'' SAE Paper No. 2000–01–3522, Truck and Bus Meeting and Exposition, December 2000, Society of Automotive Engineers.

[60] Table 13 shows that 8 of the 9 rear impact guards tested by IIHS could not prevent PCI in a 56 km/h (35 mph) crash with 30 percent overlap of the Chevrolet Malibu.

[61] Cost and weight analysis for rear impact guards on heavy trucks, Docket No. NHTSA–2011–0066–0086, June 2013.

[62] *http://trailer-bodybuilders.com/trailer-output/2014-trailer-production-figures-table.*

TABLE 11—COST OF PROPOSED RULE WITH AVERAGE INCREASE IN WEIGHT, IN MILLIONS, IN 2013 DOLLARS

Cost	No-discount	3%	7%
Material	$2.54	$2.54	$2.54
Fuel	10.44	9.23	8.22
Total	12.98	11.77	10.76

The agency estimates that the net cost per equivalent lives saved is $9.1 million and $9.5 million discounted at 3 percent and 7 percent, respectively. A summary of the regulatory cost and net benefit of the proposed rule at the 3 percent and 7 percent discount rates are presented in Table 12. At 3 percent discount rate, the net benefit of the proposed rule is $0.59 million. At 7 percent discount rate, the net benefit of the proposed rule is $0.13 million.

TABLE 12—COST-EFFECTIVENESS AND NET BENEFITS (2013 DOLLARS), IN MILLION

Discount	Regulatory cost	Societal Econ. savings	VSL* savings	Total benefits [1]	Net benefits [2]
3%	$11.77	$1.52	$10.85	$12.37	$0.59
7%	10.76	1.35	9.54	10.89	0.13

* Value of Statistical Life.
[1] Total Benefit = Societal Economic Benefit + VSL Benefit.
[2] Net Benefit = Total Benefit − Regulatory Cost.

For further information regarding the aforementioned cost and benefit estimates, please reference the preliminary regulatory evaluation (PRE) that NHTSA prepared and placed in the Docket.[63]

We have tentatively decided not to require used trailers be retrofitted with CMVSS No. 223 compliant rear impact guards. Our analysis indicates such a retrofitting requirement would be very costly without sufficient safety benefits. The net benefit for a retrofitting requirement was estimated to be −$402 million at 3 percent discount rate and -$414 million at 7 percent discount rate. Details of the analysis for a retrofitting requirement are provided in the PRE.

VIII. Proposed Lead Time

NHTSA proposes a lead time of two years following date of publication of a final rule. NHTSA provided a two year lead time when FMVSS Nos. 223 and 224 were adopted. We note that 93 percent of trailers already meet the requirements of CMVSS No. 223, so we tentatively conclude that two years will provide sufficient time for guard and trailer manufacturers to meet the requirements proposed today. Comments are requested on whether the lead time is appropriate.

[63] The PRE discusses issues relating to the potential costs, benefits, and other impacts of this regulatory action. The PRE is available in the docket for this NPRM and may be obtained by downloading it or by contacting Docket Management at the address or telephone number provided at the beginning of this document.

IX. Regulatory Notices and Analyses

Executive Order (E.O.) 12866 (Regulatory Planning and Review), E.O. 13563, and DOT Regulatory Policies and Procedures

The agency has considered the impact of this rulemaking action under E.O. 12866, E.O. 13563, and the Department of Transportation's regulatory policies and procedures. This rulemaking was not reviewed by the Office of Management and Budget under E.O. 12866, ''Regulatory Planning and Review.'' The rulemaking action has also been determined to be not significant under the Department's regulatory policies and procedures. NHTSA's Preliminary Regulatory Evaluation fully discusses the estimated costs, benefits and other impacts of this NPRM.

As discussed in the PRE and summarized in the section above, the annual incremental fleet cost of equipping all applicable trailers with CMVSS No. 223 rear impact guards is estimated to be approximately $2.5 million (= 243,873 × 0.65 × (1.0–0.93) × $229). The agency estimates that 93 percent of new trailers in the U.S. are already equipped with CMVSS No. 223 compliant guards. The agency estimates that the incremental effectiveness of CMVSS No. 223 guards over FMVSS No. 223 guards is 13 percent in preventing fatalities in light vehicle crashes with PCI into the rear of trailers. The agency estimates that about 0.66 life (= 72 × (1–0.93) × 0.13) would be saved annually by requiring all applicable trailers to be equipped with CMVSS No. 223 compliant guards.[64] The agency also estimated that a total of 2.7 serious injuries would be prevented annually with the proposed underride guard rule. The equivalent lives saved were estimated to be 1.1 and 1 lives discounted at 3 percent and 7 percent, respectively. The agency estimates that the net cost per equivalent lives saved is $9.1 million and $9.5 million discounted at 3 percent and 7 percent, respectively.

Consistent with E.O. 13563, ''Improving Regulation and Regulatory Review,'' NHTSA is proposing to amend FMVSS Nos. 223 and 224 as a result of retrospectively analyzing the effectiveness of the standards. NHTSA realized the merits of CMVSS No. 223 in addressing the same safety need that is the subject of FMVSS Nos. 223 and 224, and has undertaken rulemaking to adopt upgraded strength and other requirements of CMVSS No. 223.

Regulatory Flexibility Act

Pursuant to the Regulatory Flexibility Act (5 U.S.C. 601 *et seq.,* as amended by the Small Business Regulatory Enforcement Fairness Act (SBREFA) of 1996) whenever an agency is required to publish a notice of proposed rulemaking or final rule, it must prepare and make available for public comment a regulatory flexibility analysis that describes the effect of the rule on small entities (*i.e.,* small businesses, small organizations, and small governmental

[64] CMVSS No. 223 compliant rear impact guards may mitigate the severity of impact into the rear of trailers at speeds greater than 56 km/h (35 mph), but NHTSA is unable to quantify this possible benefit at this time. We seek comment on this issue.

jurisdictions), unless the head of an agency certifies the rule will not have a significant economic impact on a substantial number of small entities. Agencies must also provide a statement of the factual basis for this certification.

I certify that this proposed rule would not have a significant economic impact on a substantial number of small entities. NHTSA estimates there to be 354 manufacturers of trailers in the U.S., 331 of which are small businesses. The impacts of this proposed rule on small trailer manufacturers would not be significant. This NPRM proposes changes to the strength requirements applying to underride guards, but would not be amending the method by which small trailer manufacturers can certify compliance with FMVSS Nos. 223 and 224.

FMVSS No. 223, an equipment standard, specifies strength and energy absorption requirements in quasi-static force tests of rear impact guards sold for installation on new trailers and semitrailers. FMVSS No. 224, a vehicle standard, requires new trailers and semitrailers with a GVWR of 4,536 kg (10,000 lb) or more to be equipped with a rear impact guard meeting FMVSS No. 223. NHTSA established the two-standard approach to provide underride protection in a manner that imposes reasonable compliance burdens on small trailer manufacturers.

Under FMVSS No. 223, the guard may be tested for compliance while mounted to a test fixture or to a complete trailer. FMVSS No. 224 requires that the guard be mounted on the trailer or semitrailer in accordance with the instructions provided with the guard by the guard manufacturer. Under this approach, a small manufacturer that produces relatively few trailers can certify its trailers to FMVSS No. 224 without feeling compelled to undertake destructive testing of what could be a substantial portion of its production. The two-standard approach was devised to provide small manufacturers a practicable and reasonable means of meeting the safety need served by an underride guard requirement. This NPRM does not propose changing the method of certifying compliance to the underride guard requirements of FMVSS Nos. 223 and 224.

National Environmental Policy Act

NHTSA has analyzed this proposed rule for the purposes of the National Environmental Policy Act and determined that it would not have any significant impact on the quality of the human environment.

Executive Order 13132 (Federalism)

NHTSA has examined today's proposed rule pursuant to Executive Order 13132 (64 FR 43255, August 10, 1999) and concluded that no additional consultation with States, local governments or their representatives is mandated beyond the rulemaking process. The agency has concluded that the rulemaking would not have sufficient federalism implications to warrant consultation with State and local officials or the preparation of a federalism summary impact statement. The proposed rule would not have ''substantial direct effects on the States, on the relationship between the national government and the States, or on the distribution of power and responsibilities among the various levels of government.''

NHTSA rules can preempt in two ways. First, the National Traffic and Motor Vehicle Safety Act contains an express preemption provision: When a motor vehicle safety standard is in effect under this chapter, a State or a political subdivision of a State may prescribe or continue in effect a standard applicable to the same aspect of performance of a motor vehicle or motor vehicle equipment only if the standard is identical to the standard prescribed under this chapter. 49 U.S.C. § 30103(b)(1). It is this statutory command by Congress that preempts any non-identical State legislative and administrative law addressing the same aspect of performance.

The express preemption provision described above is subject to a savings clause under which ''[c]ompliance with a motor vehicle safety standard prescribed under this chapter does not exempt a person from liability at common law.'' 49 U.S.C. § 30103(e) Pursuant to this provision, State common law tort causes of action against motor vehicle manufacturers that might otherwise be preempted by the express preemption provision are generally preserved. However, the Supreme Court has recognized the possibility, in some instances, of implied preemption of such State common law tort causes of action by virtue of NHTSA's rules, even if not expressly preempted. This second way that NHTSA rules can preempt is dependent upon there being an actual conflict between an FMVSS and the higher standard that would effectively be imposed on motor vehicle manufacturers if someone obtained a State common law tort judgment against the manufacturer, notwithstanding the manufacturer's compliance with the NHTSA standard. Because most NHTSA standards established by an FMVSS are minimum standards, a State common law tort cause of action that seeks to impose a higher standard on motor vehicle manufacturers will generally not be preempted. However, if and when such a conflict does exist—for example, when the standard at issue is both a minimum and a maximum standard—the State common law tort cause of action is impliedly preempted. See *Geier* v. *American Honda Motor Co.,* 529 U.S. 861 (2000).

Pursuant to Executive Order 13132 and 12988, NHTSA has considered whether this proposed rule could or should preempt State common law causes of action. The agency's ability to announce its conclusion regarding the preemptive effect of one of its rules reduces the likelihood that preemption will be an issue in any subsequent tort litigation. To this end, the agency has examined the nature (*e.g.,* the language and structure of the regulatory text) and objectives of today's proposed rule and finds that this proposed rule, like many NHTSA rules, would prescribe only a minimum safety standard. As such, NHTSA does not intend that this proposed rule would preempt state tort law that would effectively impose a higher standard on motor vehicle manufacturers than that established by today's proposed rule. Establishment of a higher standard by means of State tort law would not conflict with the minimum standard proposed here. Without any conflict, there could not be any implied preemption of a State common law tort cause of action.

Civil Justice Reform

With respect to the review of the promulgation of a new regulation, section 3(b) of Executive Order 12988, ''Civil Justice Reform'' (61 FR 4729, February 7, 1996) requires that Executive agencies make every reasonable effort to ensure that the regulation: (1) Clearly specifies the preemptive effect; (2) clearly specifies the effect on existing Federal law or regulation; (3) provides a clear legal standard for affected conduct, while promoting simplification and burden reduction; (4) clearly specifies the retroactive effect, if any; (5) adequately defines key terms; and (6) addresses other important issues affecting clarity and general draftsmanship under any guidelines issued by the Attorney General. This document is consistent with that requirement.

Pursuant to this Order, NHTSA notes as follows. The preemptive effect of this proposed rule is discussed above. NHTSA notes further that there is no requirement that individuals submit a

petition for reconsideration or pursue other administrative proceeding before they may file suit in court.

Paperwork Reduction Act (PRA)

Under the Paperwork Reduction Act of 1995, a person is not required to respond to a collection of information by a Federal agency unless the collection displays a valid OMB control number. Before seeking OMB approval, Federal agencies must provide a 60-day public comment period and otherwise consult with members of the public and affected agencies concerning each collection of information requirement. There are no Paperwork Reduction Act requirements associated with this proposed rule.

National Technology Transfer and Advancement Act

Under the National Technology Transfer and Advancement Act of 1995 (NTTAA) (Pub. L. 104–113), all Federal agencies and departments shall use technical standards that are developed or adopted by voluntary consensus standards bodies, using such technical standards as a means to carry out policy objectives or activities determined by the agencies and departments. Voluntary consensus standards are technical standards (*e.g.,* material specifications, test methods, sampling procedures, and business practices) that are developed or adopted by voluntary consensus standards bodies, such as the International Organization for Standardization (ISO) and the Society of Automotive Engineers (SAE). The NTTAA directs us to provide Congress, through OMB, explanations when we decide not to use available and applicable voluntary consensus standards.

This NPRM proposes to adopt requirements of CMVSS No. 223, as discussed later in this section. NHTSA's consideration of CMVSS No. 223 accords with the principles of NTTAA, in that NHTSA is considering an established, proven standard, and has not had to expend significant agency resources on the same safety need addressed by CMVSS No. 223.

Unfunded Mandates Reform Act

Section 202 of the Unfunded Mandates Reform Act of 1995 (UMRA), Pub. L. 104–4, requires Federal agencies to prepare a written assessment of the costs, benefits, and other effects of proposed or final rules that include a Federal mandate likely to result in the expenditure by State, local, or tribal governments, in the aggregate, or by the private sector, of more than $100 million annually (adjusted for inflation with base year of 1995). Adjusting this amount by the implicit gross domestic product price deflator for the year 2013 results in $142 million (106.733/75.324 = 1.42). This NPRM would not result in a cost of $142 million or more to either State, local, or tribal governments, in the aggregate, or the private sector. Thus, this NPRM is not subject to the requirements of sections 202 of the UMRA.

Executive Order 13609 (Promoting International Regulatory Cooperation)

The policy statement in section 1 of E.O. 13609 provides, in part:

The regulatory approaches taken by foreign governments may differ from those taken by U.S. regulatory agencies to address similar issues. In some cases, the differences between the regulatory approaches of U.S. agencies and those of their foreign counterparts might not be necessary and might impair the ability of American businesses to export and compete internationally. In meeting shared challenges involving health, safety, labor, security, environmental, and other issues, international regulatory cooperation can identify approaches that are at least as protective as those that are or would be adopted in the absence of such cooperation. International regulatory cooperation can also reduce, eliminate, or prevent unnecessary differences in regulatory requirements.

This rulemaking is considering adopting requirements of CMVSS No. 223 to upgrade FMVSS Nos. 223 and 224. In 2005, Transport Canada issued upgraded rear impact protection requirements for trailers and semitrailers. Given that passenger car models manufactured in 2005 and later in Canada are required to provide adequate occupant protection to restrained occupants in 56 km/h (35 mph) full frontal rigid barrier crashes, Transport Canada requires rear impact guards to provide sufficient strength and energy absorption to prevent PCI of compact and subcompact passenger cars impacting the rear of trailers at 56 km/h (35 mph). FMVSS No. 208 has similar occupant protection requirements as those applicable in Canada. NHTSA believes that the FMVSS Nos. 223 and 224 requirements can be upgraded to that required by CMVSS No. 223's upgraded requirements for the same principles underlying the CMVSS No. 223 upgrade.

CMVSS No. 223, ''Rear impact guards,'' is applicable to trailers and semitrailers and has similar geometric specifications for rear impact guards as FMVSS No. 224. CMVSS No. 223 specifies quasi-static loading tests similar to those in FMVSS No. 223. However, CMVSS No. 223 replaced the 100,000 N quasi-static point load test at the P3 location in FMVSS No. 223 with a 350,000 N uniform distributed load test on the horizontal member.[65] The guard is required to withstand this load and absorb at least 20,000 J of energy within 125 mm of deflection, and have a ground clearance after the test not exceeding 560 mm (22 inches). Similar to FMVSS No. 223, CMVSS No. 223 permits testing the rear impact guard when attached, per manufacturer's instructions, to a rigid test fixture or to a complete trailer. These requirements ensure that compact and subcompact passenger cars would not have PCI when rear-ending a CMVSS No. 223 compliant trailer at 56 km/h (35 mph).

Table 13 presents a comparison of rear impact protection requirements for trailers in the U.S., Canada, and Europe.

TABLE 13—COMPARISON OF REAR IMPACT PROTECTION REQUIREMENTS FOR TRAILERS IN U.S., CANADA, AND EUROPE

Requirement	U.S.	Canada	Europe
Applicable standards	FMVSS No. 223/224	CMVSS No. 223	ECE R.58.
Geometric requirements in unloaded condition			
Ground clearance	560 mm	560 mm	550 mm.
Longitudinal distance from rear extremity.	305 mm	305 mm.	

[65] The load is applied uniformly across the horizontal member by a uniform load application structure with length that exceeds the distance between the outside edges of the vertical support of the horizontal member and which is centered on the horizontal member of the guard.

TABLE 13—COMPARISON OF REAR IMPACT PROTECTION REQUIREMENTS FOR TRAILERS IN U.S., CANADA, AND EUROPE—Continued

Requirement	U.S.	Canada	Europe
Lateral distance from side of vehicle	100 mm	100 mm	100 mm.
Quasi-static load tests			
Point load at P1 (outer edge of guard).	50 kN	50 kN	25 kN.
Point load at P2 (center of guard)	50 kN	50 kN	25 kN.
Point load at P3 (at the guard supports).	100 kN with no more than 125 mm displacement, 5,650 J energy absorption.		100 kN with distance of rear impact guard from vehicle rear extremity of 400 mm after test.
Distributed load		350 kN with no more than 125 mm displacement and 20,000 J energy absorption; guard ground clearance less than 560 mm after test.	

The European standard, ECE R.58, ''Rear underrun protective devices (RUPD); Vehicles with regard to the installation of an RUPD of an approved vehicle; Vehicles with regard to their rear underrun protection,'' specifies rear impact protection requirements for trailers weighing more than 3,500 kg (7,716 lb). The dimensional and strength requirements for rear impact guards in ECE R.58 are similar to but less stringent than those specified in FMVSS Nos. 223 and 224. ECE R.58 specifies that both during and after the quasi-static force application test, the horizontal distance between the rear of the rear impact guard and the rear extremity of the vehicle not be greater than 400 mm. However, ECE R.58 does not specify any energy absorption requirements.

NHTSA has decided to propose the strength requirements of CMVSS No. 223 rather than ECE R.58 because the rear impact protection requirements for trailers in Canada are more stringent than that in Europe, and more appropriate for the underride crashes experienced in the U.S. Passenger vehicles in the U.S. are required by FMVSS No. 208 to have frontal air bag protection and comply with a full frontal 56 km/h (35 mph) rigid barrier crash test by ensuring that the injury measures of crash test dummies restrained in front seating positions are within the allowable limits. CMVSS No. 223 is designed to prevent PCI in full frontal 56 km/h (35 mph) crashes. Together, FMVSS No. 208 and FMVSS Nos. 223 and 224 would significantly reduce the harm resulting to occupants of passenger vehicles impacting the rear of trailers in crashes of up to 56 km/h (35 mph).

Regulation Identifier Number

The Department of Transportation assigns a regulation identifier number (RIN) to each regulatory action listed in the Unified Agenda of Federal Regulations. The Regulatory Information Service Center publishes the Unified Agenda in April and October of each year. You may use the RIN contained in the heading at the beginning of this document to find this action in the Unified Agenda.

Plain Language

Executive Order 12866 requires each agency to write all rules in plain language. Application of the principles of plain language includes consideration of the following questions:

- Have we organized the material to suit the public's needs?
- Are the requirements in the rule clearly stated?
- Does the rule contain technical language or jargon that isn't clear?
- Would a different format (grouping and order of sections, use of headings, paragraphing) make the rule easier to understand?
- Would more (but shorter) sections be better?
- Could we improve clarity by adding tables, lists, or diagrams?
- What else could we do to make the rule easier to understand?

If you have any responses to these questions, please write to us with your views.

Privacy Act

In accordance with 5 U.S.C. 553(c), DOT solicits comments from the public to better inform its rulemaking process. DOT posts these comments, without edit, including any personal information the commenter provides, to *www.regulations.gov*, as described in the system of records notice (DOT/ALL–14 FDMS), which can be reviewed at *www.dot.gov/privacy*.

X. Public Participation

In developing this proposal, we tried to address the concerns of all our stakeholders. Your comments will help us improve this proposed rule. We welcome your views on all aspects of this proposed rule, but request comments on specific issues throughout this document. Your comments will be most effective if you follow the suggestions below:

- Explain your views and reasoning as clearly as possible.
- Provide solid technical and cost data to support your views.
- If you estimate potential costs, explain how you arrived at the estimate.
- Tell us which parts of the proposal you support, as well as those with which you disagree.
- Provide specific examples to illustrate your concerns.
- Offer specific alternatives.
- Refer your comments to specific sections of the proposal, such as the units or page numbers of the preamble, or the regulatory sections.
- Be sure to include the name, date, and docket number with your comments.

Your comments must be written and in English. To ensure that your comments are correctly filed in the docket, please include the docket number of this document in your comments.

Your comments must not be more than 15 pages long (49 CFR § 553.21).

We established this limit to encourage you to write your primary comments in a concise fashion. However, you may attach necessary additional documents to your comments. There is no limit on the length of the attachments.

Please submit your comments to the docket electronically by logging onto *http://www.regulations.gov* or by the means given in the **ADDRESSES** section at the beginning of this document.

Please note that pursuant to the Data Quality Act, in order for substantive data to be relied upon and used by the agency, it must meet the information quality standards set forth in the OMB and DOT Data Quality Act guidelines. Accordingly, we encourage you to consult the guidelines in preparing your comments. OMB's guidelines may be accessed at *http://www.whitehouse.gov/omb/fedreg/reproducible.html*.

How do I submit confidential business information?

If you wish to submit any information under a claim of confidentiality, you should submit three copies of your complete submission, including the information you claim to be confidential business information, to the Chief Counsel, NHTSA, at the address given above under **FOR FURTHER INFORMATION CONTACT**. In addition, you should submit a copy from which you have deleted the claimed confidential business information to the docket. When you send a comment containing information claimed to be confidential business information, you should include a cover letter setting forth the information specified in our confidential business information regulation. (49 CFR Part 512.)

Will the agency consider late comments?

We will consider all comments that the docket receives before the close of business on the comment closing date indicated above under **DATES**. To the extent possible, we will also consider comments that the docket receives after that date. If the docket receives a comment too late for us to consider it in developing a final rule (assuming that one is issued), we will consider that comment as an informal suggestion for future rulemaking action.

How can I read the comments submitted by other people?

You may read the comments received by the docket at the address given above under **ADDRESSES**. You may also see the comments on the Internet (*http://regulations.gov*).

Please note that even after the comment closing date, we will continue to file relevant information in the docket as it becomes available. Further, some people may submit late comments. Accordingly, we recommend that you periodically check the docket for new material.

Anyone is able to search the electronic form of all comments received into any of our dockets by the name of the individual submitting the comment (or signing the comment, if submitted on behalf of an association, business, labor union, etc.). You may review DOT's complete Privacy Act Statement in the **Federal Register** published on April 11, 2000 (Volume 65, Number 70; Pages 19477–78). See Privacy Act heading above under Rulemaking Analyses and Notices.

List of Subjects in 49 CFR Part 571

Imports, Motor vehicle safety, Motor vehicles, Rubber and rubber products, Tires.

In consideration of the foregoing, NHTSA proposes to amend 49 CFR part 571 as set forth below.

PART 571—FEDERAL MOTOR VEHICLE SAFETY STANDARDS

■ 1. The authority citation for Part 571 continues to read as follows:

Authority: 49 U.S.C. 322, 30111, 30115, 30117 and 30166; delegation of authority at 49 CFR 1.95.

■ 2. Section 571.223 is amended by:
■ a. Revising S3;
■ b. Amending S4 by adding a definition of ''ground clearance,'' in alphabetical order;
■ c. Revising S5.2; S5.5(c); the introductory text of S6; the last sentence of S6.1; S6.3; the introductory texts of S6.4, S6.4(a), and S6.4(b);
■ d. Removing S6.4(c);
■ e. Revising S6.5 and S6.6;
■ f. Adding S6.7 through S6.9; and,
■ g. Revising Figures 1 and 2, and adding Figures 3 and 4.

The added and amended text and figures read as follows:

§ 571.223 Standard No. 223; Rear impact guards.

* * * * *

S3. *Application.* This standard applies to rear impact guards for trailers and semitrailers subject to Federal Motor Vehicle Safety Standard No. 224, *Rear Impact Protection* (§ 571.224).

S4.

* * * * *

Ground clearance means the vertical distance from the bottom edge of a horizontal member to the ground.

* * * * *

S5.2 *Strength and Energy Absorption.* When tested under the procedures of S6 of this section, each guard shall comply with the strength requirements of S5.2.1 of this section at each test location, and the energy absorption requirements of S5.2.2 of this section when a distributed load is applied uniformly across the horizontal member as specified in S6.6 of this section. However, a particular guard (*i.e.,* test specimen) need not be tested at more than one location.

S5.2.1 *Guard Strength.* The guard must resist the force levels specified in S5.2.1 (a) through (c) of this section without deflecting by more than 125 mm and without complete separation of any portion of the guard and guard attachments from its mounting structure.

(a) A force of 50,000 N applied in accordance with S6.8 at test location P1 on either the left or the right side of the guard, as defined in S6.4(a) of this section.

(b) A force of 50,000 N applied in accordance with S6.8 at test location P2, as defined in S6.4(b) of this section.

(c) A uniform distributed force of at least 350,000 N applied across the horizontal member, as specified in S6.6 and in accordance with S6.8.

S5.2.2 Guard Energy Absorption

(a) A guard, other than a hydraulic guard or one installed on a tanker trailer, when subjected to a uniform distributed load applied in accordance with S6.8(c) of this section:

(1) shall absorb by plastic deformation at least 20,000 J of energy within the first 125 mm of deflection without complete separation of any portion of the guard and guard attachments from its mounting structure; and

(2) have a ground clearance not exceeding 560 mm, measured at each support to which the horizontal member is attached, as shown in Figure 4, after completion of the load application.

(b) A guard, other than a hydraulic guard or one installed on a tanker trailer, that demonstrates resistance to a uniform distributed load greater than 700,000 N applied in accordance with S6.8(b) of this section, need not meet the energy absorption requirements of S5.2.2(a) but must have a ground clearance not exceeding 560 mm at each vertical support to which the horizontal member is attached after completion of the 700,000 N load application.

* * * * *

S5.5

* * * * *

(c) An explanation of the method of attaching the guard to the chassis of each vehicle make and model listed or to the design elements specified in the instructions or procedures. The

principal aspects of vehicle chassis configuration that are necessary to the proper functioning of the guard shall be specified including the maximum allowable vertical distance between the bottom edge of the horizontal member of the guard and the ground to ensure post-test ground clearance requirements are met. If the chassis strength is inadequate for the guard design, the instructions or procedures shall specify methods for adequately reinforcing the vehicle chassis. Procedures for properly installing any guard attachment hardware shall be provided.

S6. *Guard Test Procedures.* The procedures for determining compliance with S5.2 of this section are specified in S6.1 through S6.9 of this section.

S6.1 * * * The hydraulic units are compressed before the application of force to the guard in accordance with S6.8 of this section and maintained in this condition throughout the testing under S6.8 of this section.

* * * * *

S6.3 *Point Load Force Application Device.* The force application device employed in S6.8 of this section consists of a rectangular solid made of rigid steel. The steel solid is 203 mm in height, 203 mm in width, and 25 mm in thickness. The 203 mm by 203 mm face of the block is used as the contact surface for application of the forces specified in S5.2.1 (a) and (b) of this section. Each edge of the contact surface of the block has a radius of curvature of 5 mm plus or minus 1 mm.

S6.4 *Point Load Test Locations.* With the guard mounted to the rigid test fixture or to a complete trailer, determine the test locations P1 and P2 in accordance with the procedure set forth in S6.4 (a) and (b) of this section. See Figure 1 of this section.

(a) Point Load Test location P1 is the point on the rearmost surface of the horizontal member of the guard that:

* * * * *

(b) Point Load Test location P2 is the point on the rearmost surface of the horizontal member of the guard that:

* * * * *

S6.5 *Uniform Distributed Load Force Application Device.* The force application device to be employed in applying the uniform distributed load is to be unyielding, have a height of 203 mm, and have a width that exceeds the distance between the outside edges of the outermost supports to which the tested portion of the horizontal member is attached, as shown in Figure 2.

S6.6 *Uniform Distributed Load Test Location.* With the guard mounted to the rigid test fixture or to a complete trailer, determine the test location in accordance with the following procedure. See Figure 2 of this section. Distributed Force Test location is the plane on the rearmost surface of the horizontal member of the guard that:

(a) Is centered in the longitudinal vertical plane passing through the center of the guard's horizontal member; and

(b) Is centered 50 mm above the bottom of the guard.

S6.7 *Positioning of Force Application Device.* Before applying any force to the guard, locate the force application device specified in S6.3 for the point load test location and that specified in S6.5 for the uniform distributed load test location, such that:

(a) The center point of the contact surface of the force application device is aligned with and touching the guard test location, as defined by the specifications of S6.4 of this section for the point load test locations, and S6.6 of this section for the uniform distributed load test location.

(b) The longitudinal axis of the force application device passes through the test location and is perpendicular to the transverse vertical plane that is tangent to the rearmost surface of the guard's horizontal member.

(c) If the guard is tested on a rigid test fixture, the vertical distance from the bottom edge of the horizontal member to the ground at the location of each support to which the horizontal member is attached, shall be measured.

S6.8 *Force Application.* After the force application device has been positioned, according to S6.7 of this section, at the point load test locations specified in S6.4 of this section or the uniform distributed load test location specified in S6.6 of this section, apply the loads specified in S5.2 of this section. Load application procedures are specified in S6.8 (a) through (d) of this section.

(a) Using the force application device, apply force to the guard in a forward direction such that the displacement rate of the force application device is the rate, plus or minus 10 percent, designated by the guard manufacturer within the range of 2.0 cm per minute to 9.0 cm per minute. If the guard manufacturer does not designate a rate, any rate within that range may be chosen.

(b) If conducting a strength test to satisfy the requirement of S5.2.1 or S5.2.2(b) of this section, the force is applied until the forces specified in S5.2.1 or S5.2.2(b) of this section have been exceeded, or until the displacement of the force application device has reached at least 125 mm, whichever occurs first.

(c) If conducting a test to be used for the calculation of energy absorption levels to satisfy the requirement of S5.2.2(a) of this section, apply a uniform distributed force to the guard until displacement of the force application device, specified in S6.5 of this section, has reached 125 mm. For calculation of guard energy absorption, the value of force is recorded at least ten times per 25 mm of displacement of the contact surface of the loading device. Reduce the force until the guard no longer offers resistance to the force application device. Produce a force vs. deflection diagram of the type shown in Figure 3 of this section using this information. Determine the energy absorbed by the guard by calculating the shaded area bounded by the curve in the force vs. deflection diagram and the abscissa (X-axis).

(d) During each force application, the force application device is guided so that it does not rotate. At all times during the application of force, the location of the longitudinal axis of the force application device remains constant.

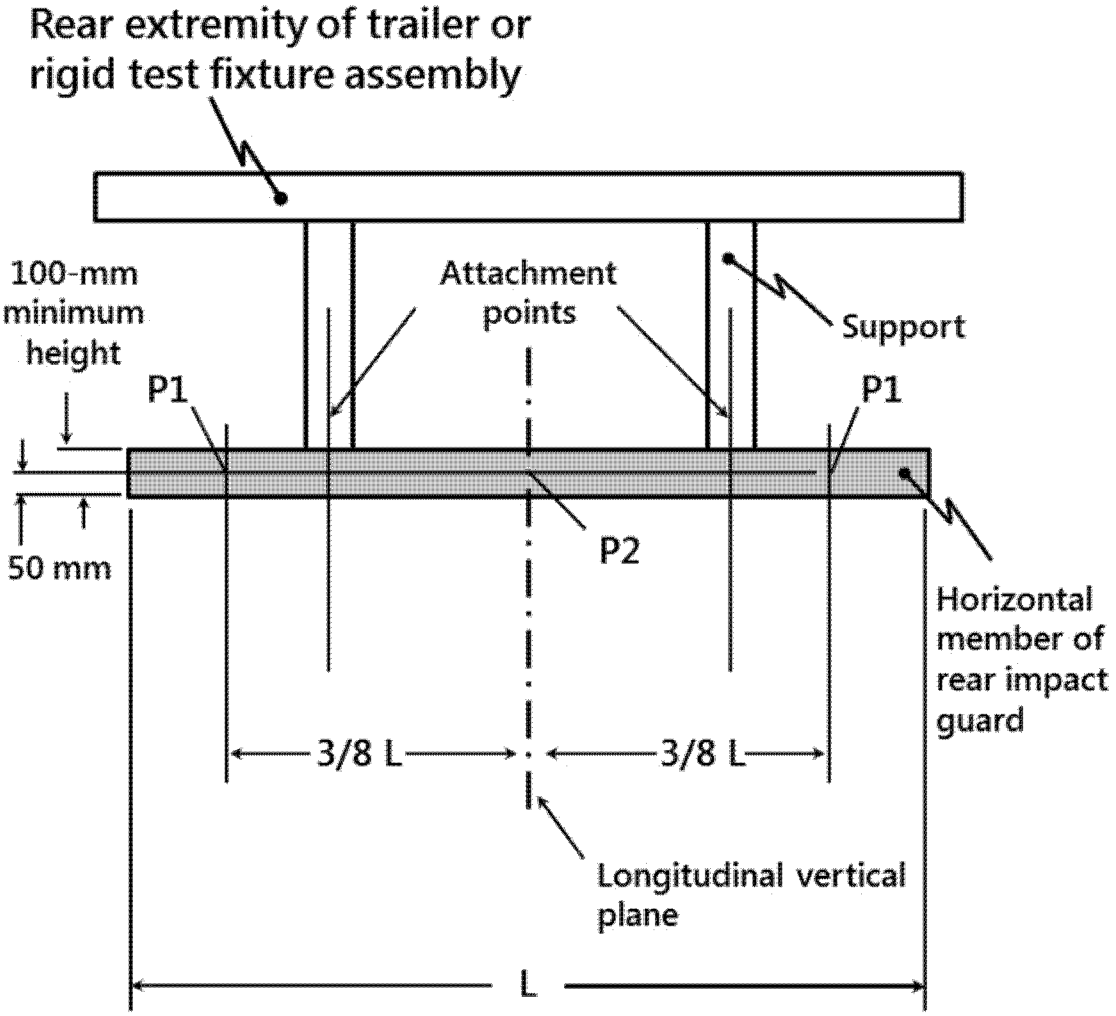
S6.9 Ground Clearance Measurement

(a) For the test device attached to a complete trailer as specified in S6.2, the ground clearance of the guard at the vertical supports to which the horizontal member is attached shall be measured after completion of the uniform distributed load test in accordance with S6.8(b) or S6.8(c) of this section.

(b) For the test device attached to a rigid test fixture as specified in S6.2, the vertical distance from the ground to the bottom edge of the horizontal member at the vertical supports to which the horizontal member is attached shall be measured after completion of the uniform distributed load test in accordance with S6.8(b) or S6.8(c) of this section and subtracted from the corresponding ground clearance measured before the load application in accordance with S6.7(c). The difference in ground clearance before and after the load application is added to the allowable maximum vertical distance between the bottom edge of the horizontal member of the guard and the ground as specified in S5.5(c), to obtain the ground clearance after completion of the uniform distributed load test.

BILLING CODE 4910–59–P

FIGURES TO § 571.223

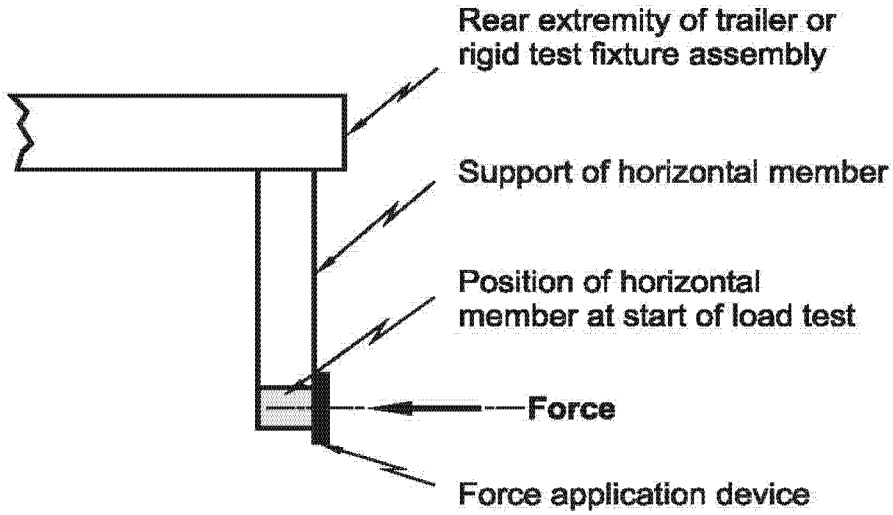


Notes:
1. L means width of the horizontal member.
2. Drawing not to scale

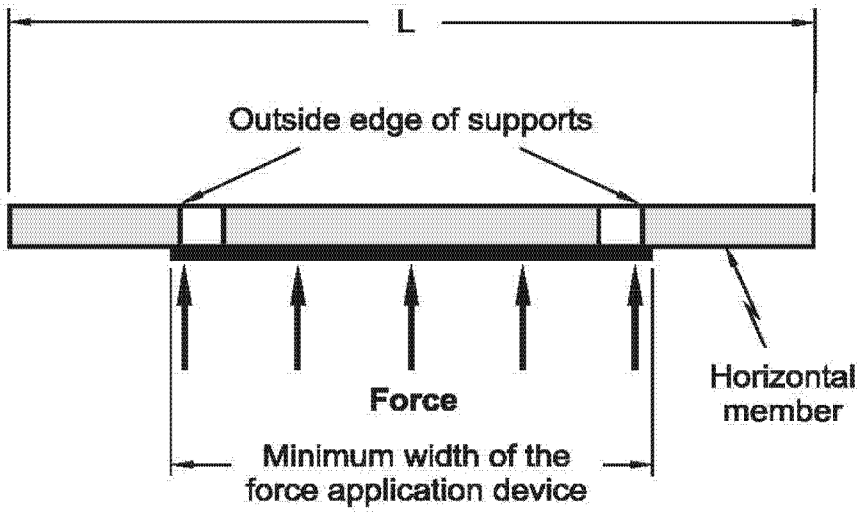
Figure 1: Rear View of the Rear Impact Guard

FIGURE 2: UNIFORM DISTRIBUTED LOAD APPLICATION TEST

SIDE VIEW



TOP VIEW



Notes:
1. L means width of the horizontal member.
2. Drawings not to scale

(Note: Drawings are not to scale)

FIGURE 3: TYPICAL FORCE DEFLECTION DIAGRAM

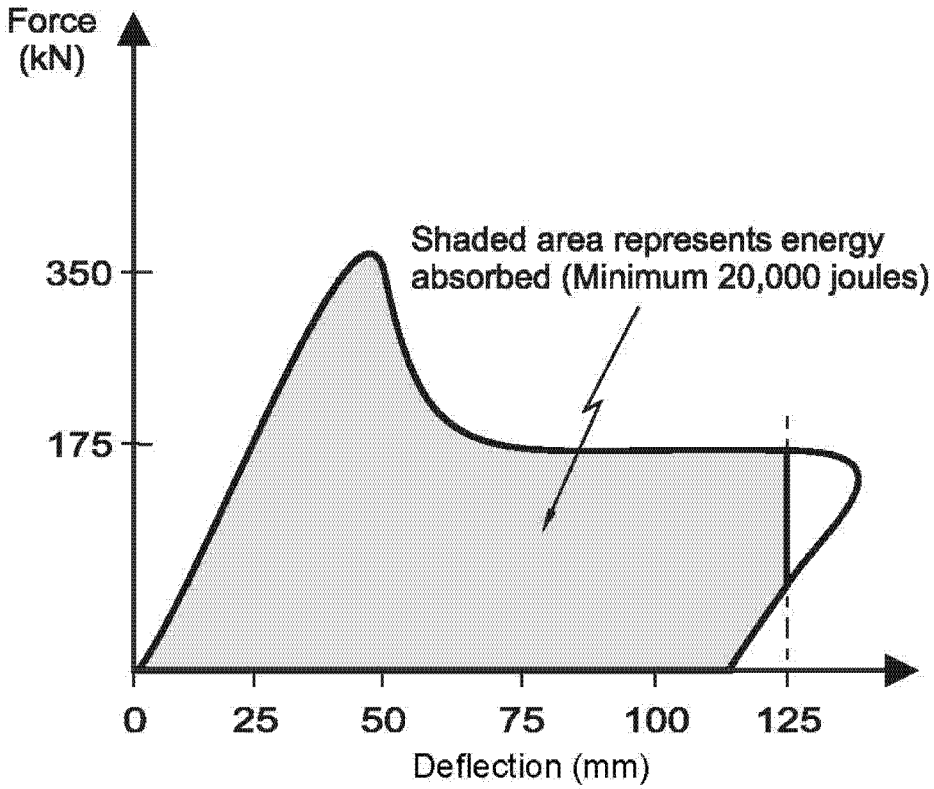
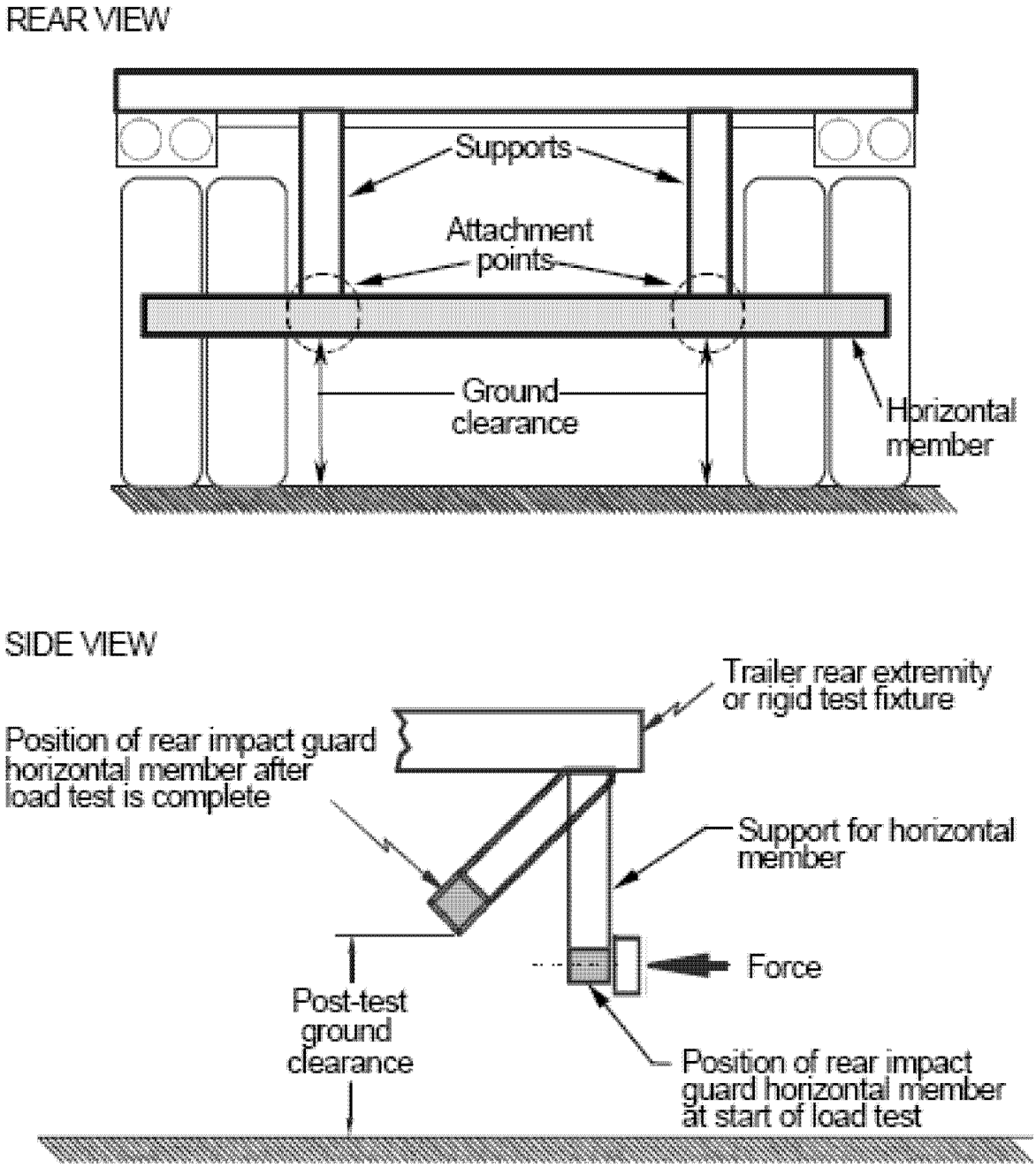


FIGURE 4: POST-TEST GROUND CLEARANCE MEASUREMENT



(Note: Drawings are not to scale)

BILLING CODE 4910–59–C

■ 3. Section 571.224 is amended by:

■ a. Revising the second sentence in S3; and;

■ b. Revising the definition of ''Rear extremity'' in S4.

The revised text reads as follows:

§ 571.224 Standard No. 224; Rear impact protection.

* * * * *

S3. *Application.* * * * The standard does not apply to pole trailers, pulpwood trailers, low chassis vehicle, road construction controlled horizontal discharge trailers, special purpose vehicles, wheels back vehicles, or temporary living quarters as defined in 49 CFR 529.2.

* * * * *

Rear extremity means the rearmost point on a trailer that is above a horizontal plane located above the ground clearance and below a

horizontal plane located 1,900 mm above the ground when the trailer is configured as specified in S5.1 and when the trailer's cargo doors, tailgate and other permanent structures are positioned as they normally are when the trailer is in motion, with non-structural protrusions excluded from the determination of the rearmost point, such as:

(a) Tail lamps,

(b) Rubber bumpers,

(c) Hinges and latches, and

(d) Flexible aerodynamic devices capable of being folded to within 305 mm from the transverse vertical plane tangent to the rear most surface of the horizontal member for vertical heights below 1,740 mm above ground and, while positioned as they normally are when the trailer is in motion, are located forward of the transverse plane that is tangent to the rear bottom edge of the horizontal member and intersecting a point located 1,210 mm rearward of the horizontal member and 1,740 mm above the ground.

* * * * *

XI. Appendix A to Preamble: 2013 NHTSA/UMTRI Study

In 2009, the agency initiated an in-depth field analysis to obtain a greater understanding of the characteristics of underride events and factors contributing to such crashes. NHTSA sought this information to assess the need for and impacts of possible amendments to the FMVSSs to reduce severe passenger vehicle underride in truck/trailer rear end impacts.

NHTSA published the first phase of the field analysis in 2012,[66] and published the final report in March 2013. The reports analyze 2008–2009 data collected as a supplement to UMTRI's TIFA survey.[67] The TIFA survey contains data for all the trucks with a GVWR greater than 4,536 kg (10,000 lb) (''medium and heavy trucks'') that were involved in fatal traffic crashes in the 50 U.S. States and the District of Columbia. TIFA data contains additional detail beyond the information contained in NHTSA's FARS.

NHTSA contracted UMTRI to collect supplemental data for 2008 and 2009 as part of the TIFA survey. The supplemental data included the rear geometry of the SUTs and trailers; type of equipment at the rear of the trailer, if any; whether a rear impact guard was present; the type of rear impact guard; and, the standards the guard was manufactured to meet. For SUTs and trailers involved in fatal rear impact crashes, additional information was collected on: the extent of underride; damage to the rear impact guard; estimated impact speeds; and whether the collision was offset or had fully engaged the guard.

NHTSA derived average annual estimates from the 2008 and 2009 TIFA data files and the supplemental information collected in the 2013 UMTRI study. The agency's review of these files found that there are 3,762 SUTs and trailers involved in fatal accidents annually, among which trailers accounted for 67 percent, SUTs for 29 percent, tractors alone for 1.5 percent, and unknown for the remaining 2.5 percent.[68] About 489 SUTs and trailers are struck in the rear in fatal crashes, constituting about 13 percent of all SUTs and trailers in fatal crashes. Among rear impacted SUTs and trailers in fatal crashes, 331 (68 percent) are trailers, 151 (31 percent) are SUTs, and 7 (1 percent) are tractors alone.

Presence of Rear Impact Guard on Trailers and SUTs

UMTRI evaluated 2008 and 2009 TIFA data regarding the rear geometry of all the trailers and SUTs involved in all fatal crashes (not just those rear-impacted) to assess whether the vehicle had to have a guard under FMVSS No. 224 (regarding trailers) or the Federal Motor Carrier Safety Administration's (FMCSA's) Federal Motor Carrier Safety Regulation (FMCSR) No. 393.86(b) (49 CFR 393.86(b), ''FMCSA 393.86(b)'') (regarding SUTs).[69] Based on this evaluation, UMTRI estimated that 65 percent of trailers had to have a rear impact guard per FMVSS No. 224 (Table A–1). Among the 35 percent of trailers that did not have a guard because they were excluded from FMVSS No. 224, 26 percent were wheels back trailers,[70] 2 percent were low chassis vehicles,[71] 1 percent had equipment in the rear, and 6 percent were excluded vehicles because of type of cargo or operation. UMTRI estimated that although 38 percent of the SUTs involved in fatal crashes were required to have rear impact guards (based on the truck rear geometry according to FMCSR 393.86(b)), only 18 percent were equipped with them (Table A–1). It is likely that the remaining 20 percent of the SUTs that were configured such that they would be subject to FMCSR 393.86(b) based on vehicle design, but that did not have a guard, were not used in interstate commerce. Among the 62 percent of SUTs that were excluded from installing rear impact guards by the FMCSR, 27 percent were wheels back SUTs,[72] 9 percent were low chassis SUTs,[73] 2 percent were wheels back and low chassis SUTs, and 16 percent had equipment in the rear that interfered with rear impact guard installation (see Table A–1).

[66] Analysis of Rear Underride in Fatal Truck Crashes, DOT HS 811 652, August 2012. Also available at *http://www.nhtsa.gov/Research/Crashworthiness/Truck%20Underride*, last accessed on March 6, 2015.

[67] Heavy-Vehicle Crash Data Collection and Analysis to Characterize Rear and Side Underride and Front Override in Fatal Truck Crashes, DOT HS 811 725, March 2013. Also available at *http://www.nhtsa.gov/Research/Crashworthiness/Truck%20Underride*, last accessed on March 6, 2015.

[68] ''Bobtail'' and ''tractor/other'' configurations were combined into the ''tractors'' category and ''tractor/trailer'' and ''straight trucks with trailer'' were combined into the ''trailers'' category.

[69] UMTRI only evaluated the rear geometry to determine whether a SUT's configuration qualified the vehicle as subject to FMCSR 393.86(b). It did not determine how the truck was operated and whether it was used in interstate commerce.

[70] Wheels back trailers, defined in FMVSS No. 224, is a trailer or semitrailer whose rearmost axle is permanently fixed and is located such that the rearmost surface of tires is not more than 305 mm forward of the rear extremity of the vehicle.

[71] Low chassis trailers are defined in FMVSS No. 224, and are trailer or semitrailer having a chassis that extends behind the rearmost point of the rearmost tires and a lower rear surface that meets the configuration (width, height, and location) requirements for an underride guard.

[72] Wheels back SUTs according to FMCSR 393.86(b) is where the rearmost axle is permanently fixed and is located such that the rearmost surface of the tires is not more than 610 mm forward of the rear extremity of the vehicle.

[73] Low chassis SUTs according FMCSR 393.86(b) is where the rearmost part of the vehicle includes the chassis and the vertical distance between the rear bottom edge of the chassis assembly and the ground is less than or equal to 762 mm (30 inches).

TABLE A–1—PERCENTAGE OF TRAILERS AND SUTS BY THEIR REAR GEOMETRY AND WHETHER A REAR IMPACT GUARD WAS REQUIRED ACCORDING TO UMTRI'S EVALUATION OF SUTS AND TRAILERS INVOLVED IN FATAL CRASHES IN THE 2008–2009 TIFA DATA FILES

Type of rear geometry	Percentage of trailers	Percentage of SUTs
Rear Impact Guard Required		
Guard present	65	18
Guard not present	0	20
Rear Impact Guard Not Required		
Excluded vehicle	6	8
Wheels back vehicle	26	27
Low chassis vehicle	2	9
Wheels back and low chassis vehicle	0	2
Equipment	1	16

Since the data presented in Table A–1 takes into consideration all SUTs and trailers involved in all types of fatal crashes in 2008 and 2009 (total of 2,159 trucks and 5,231 trailers), we make the assumption that the percentage of SUTs and trailers with and without rear impact guards in Table A–1 is representative of that in the SUT and trailer fleet.

Light Vehicle Fatal Crashes Into the Rear of Trailers and SUTs

Among the types of vehicles that impacted the rear of trailers and SUTs, 73 percent were light vehicles,[74] 18 percent were large trucks, 7.4 percent were motorcycles, and 1.7 percent were other/unknown vehicle types. Since we do not expect trucks and buses to underride other trucks in rear impacts, the data presented henceforth only apply to light vehicles impacting the rear of trailers and SUTs.

Underride Extent in Fatal Crashes of Light Vehicles Into the Rear of Trailers and SUTs

In the UMTRI study of 2008 and 2009 TIFA data, survey respondents estimated the amount of underride in terms of the amount of the striking vehicle that went under the rear of the struck vehicle and/or the extent of deformation or intrusion of the vehicle. The categories were ''no underride,'' ''less than halfway up the hood,'' ''more than halfway but short of the base of the windshield,'' and ''at or beyond the base of the windshield.'' When the extent of underride is ''at or beyond the base of the windshield,'' there is PCI that could result in serious injury to occupants in the vehicle. Rear impacts into trailers and SUTs could result in some level of underride without PCI when the rear impact guard prevents the impacting vehicle from traveling too far under the heavy vehicle during impact. Such impacts into the rear of heavy vehicles without PCI may not pose additional crash risk to light vehicle occupants than that in crashes with another light vehicle at similar crash speeds.

The data show that about 319 light vehicle fatal crashes into the rear of trailers and trucks occur annually. UMTRI determined that about 36 percent (121) of light vehicle impacts into the rear of trailers and trucks resulted in PCI. Among fatal light vehicle impacts, the frequency of PCI was greatest for passenger cars and sport utility vehicles (SUVs) (40 and 41.5 percent, respectively) and lowest for large vans and large pickups (25 and 26 percent, respectively), as shown in Figure A–1 below. Since the extent of underride was also determined by the extent of deformation and intrusion of the vehicle, it was observed in a number of TIFA cases that large vans and large pickups did not actually underride the truck or trailer but sustained PCI because of the high speed of the crash and/or because of the very short front end of the vehicle.

[74] UMTRI categorized passenger cars, compact and large sport utility vehicles, minivans, large vans (*e.g.* Econoline and E150–E350), compact pickups (*e.g.,* S–10, Ranger), and large pickups (e.g Ford F100–350, Ram, Silverado) as light vehicles.

[75] The extent of underride in this and subsequent figures and tables means the following: None means ''no underride''; less than halfway means ''underride extent of less than halfway up the hood''; halfway+ means ''underride extent at or more than halfway up the hood but short of the base of the windshield''; windshield+ means ''extent of underride at or beyond the base of the windshield'' or PCI.

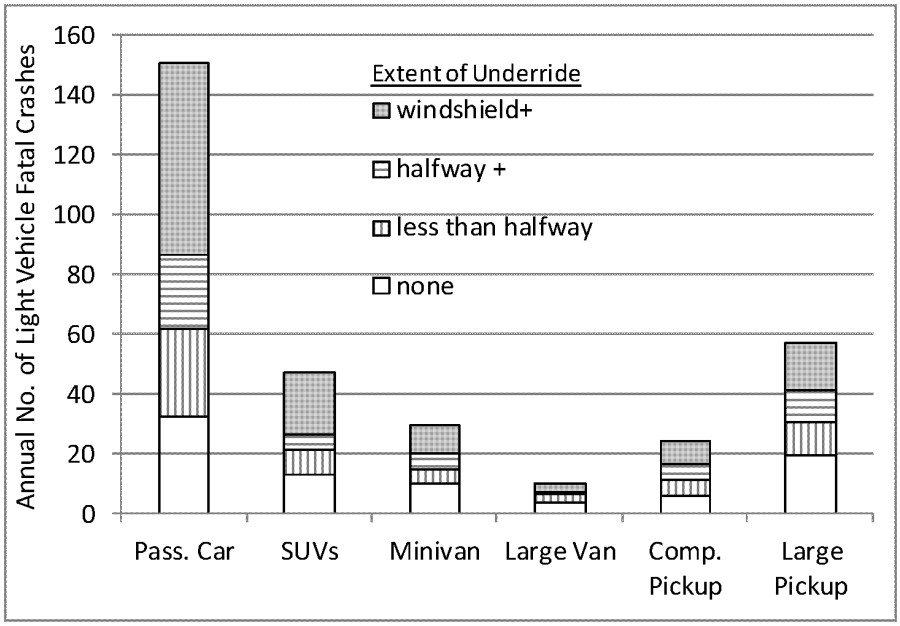


Figure A-1: Annual light vehicle fatal crashes into the rear of trailers and SUTs by type of light vehicle and extent of underride[75] (2008-2009 TIFA UMTRI study).

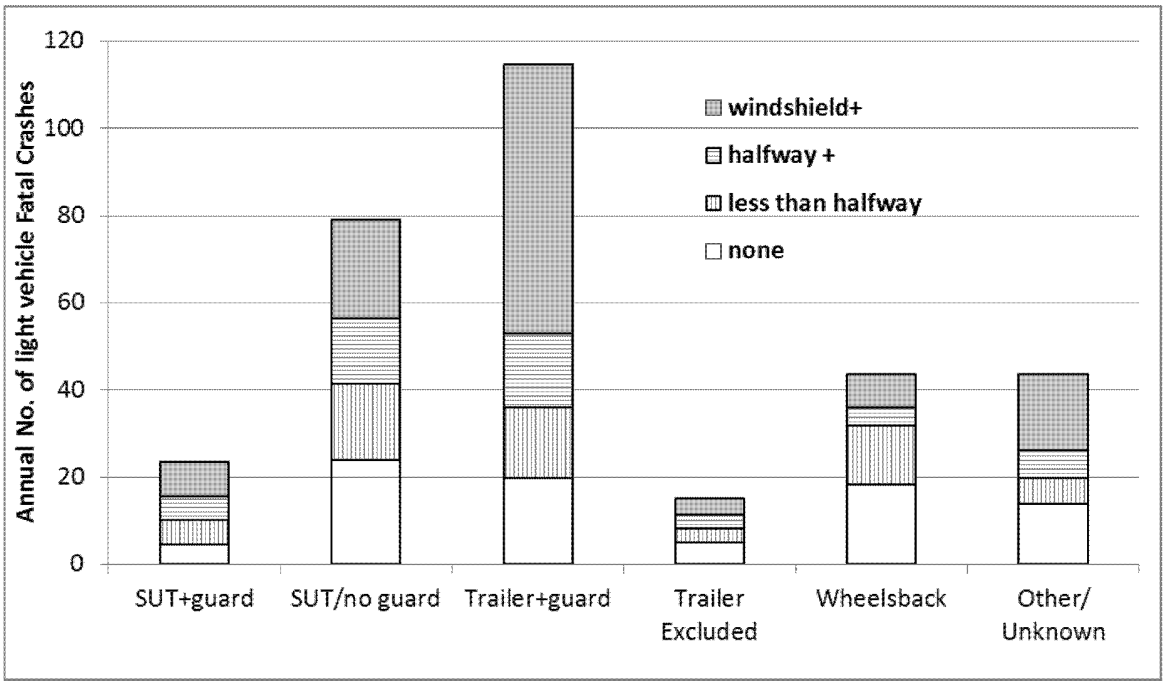
Fatal light vehicle crashes into the rear of trailers and trucks were further examined by the type of trailer and truck struck and whether a guard was required (according to FMVSS No. 224 for trailers and FMCSR 393.86(b) for SUTs) (Figure A–2 and Figure A–3).

Among the 319 annual fatal light vehicle crashes into the rear of trailers and SUTs, 23 (7 percent) are into SUTs with guards, 79 (25 percent) are into SUTs without guards, 115 (36 percent) are into trailers with guards, 44 (14 percent) into wheels back trailers, 15 (5 percent) into exempt trailers (due to equipment in rear, type of operation, low bed), and 43 (13 percent) are other types of trucks (Figure A–2).

Figure A-2: Percentage of light vehicle fatal crashes into the rear of trailers and SUTs (2008-2009 TIFA UMTRI Study)

Among these light vehicle fatal crashes annually, 121 result in PCI, among which 62 (51 percent) occur in impacts with trailers with guards, 23 (19 percent) in impacts with SUTs without guards, 8 (7 percent) in impacts with SUTs with guards, 7 (6 percent) in impacts with wheels back trailers, 4 (3 percent) with excluded trailers (by type of cargo or operation), and 17 (14

percent) in impacts with other truck/trailer type (Figure A–3).[76]



	Light vehicle fatal crashes into the rear of trailers & SUTs		Light vehicle fatal PCI crashes into the rear of trailers & SUTs	
	Annual #	Percentage	Annual #	Percentage
SUT+guard	23	7%	8	7%
SUT/no guard	79	25%	23	19%
Trailer+guard	115	36%	62	51%
Trailer Exempt	15	5%	4	3%
Wheelsback	44	14%	7	6%
Other/unknown	43	13%	17	14%
Total	319		121	

Figure A-3: Annual light vehicle fatal crashes into the rear of trailers and SUTs by type of truck/trailer and extent of underride.

It is noteworthy that trailers with guards represent 36 percent of annual light vehicle fatal rear impacts but represent 51 percent of annual light vehicle fatal rear impacts with PCI. On the other hand, SUTs (with and without guards) represent 32 percent of annual light vehicle fatal rear impacts but represent 26 percent of annual light vehicle fatal rear impacts with PCI. The field data suggest that there are more light vehicle fatal impacts into the rear of trailers than SUTs and a higher percentage of fatal light vehicle impacts into the rear of trailers involve PCI than those into the rear of SUTs.

Relative Speed of Light Vehicle Fatal Crashes Into the Rear of Trailers and SUTs

Using information derived by reviewing police crash reports,[77] UMTRI estimated the relative speed of fatal light vehicle crashes into the rear of SUTs and trailers. Relative velocity

[76] Underride extent was determined for 303 light vehicles, about 95 percent of the 319 light vehicle impacts into the rear of trailers and trucks. Unknown underride extent was distributed among known underride levels.

[77] Information included police estimates of travel speed, crash narrative, crash diagram, and witness statements. The impact speed was estimated from the travel speed, skid distance, and an estimate of the coefficient of friction.

was computed as the resultant of the difference in the trailer (truck) velocity and the striking vehicle velocity and could only be estimated for about 30 percent of light vehicle fatal crashes into the rear of trailers and SUTs. Most of the crashes (with known relative velocity) were at a very high relative velocity and many were not survivable. The mean relative velocity at impact into the rear of trailers and SUTs was estimated at 44 mph. Among fatal light vehicle impacts into the rear of trailers that resulted in PCI, 74 percent were with relative velocity greater than 56 km/h (35 mph) (Figure A–4). Among the remaining 26 percent fatal light vehicle impacts into the rear of trailers, 21 percent were trailers with guards and 5 percent were trailers excluded from FMVSS No. 224 requirements. Among fatal light vehicle impacts into the rear of SUTs that resulted in PCI, 70 percent were with relative velocity greater than 56 km/h (35 mph). Among the remaining 30 percent fatal light vehicle impacts into the rear of SUTs, 3 percent of the SUTs had rear impact guards, 10 percent of the SUTs could be required to have a guard based on rear geometry but did not have a guard, 3 percent were excluded from requiring a guard (wheels back, low chassis vehicles), and 14 percent had equipment in the rear precluding rear impact guards.

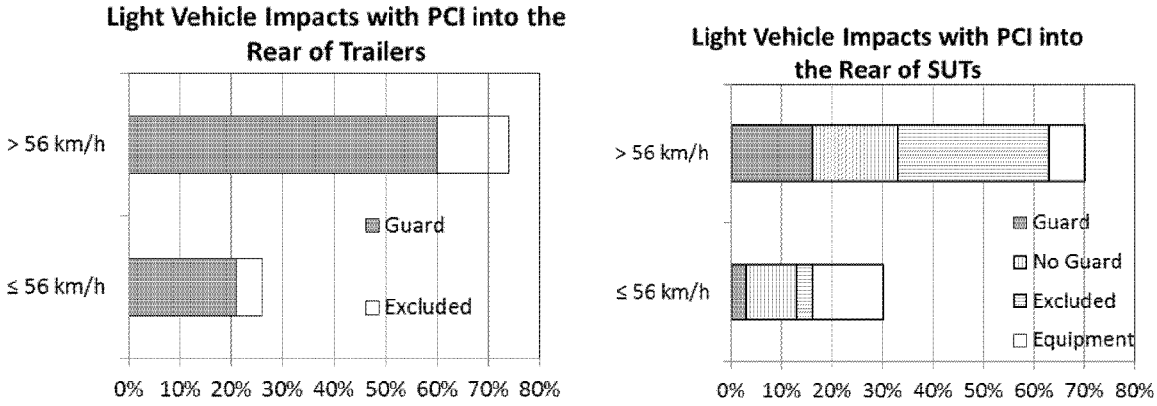


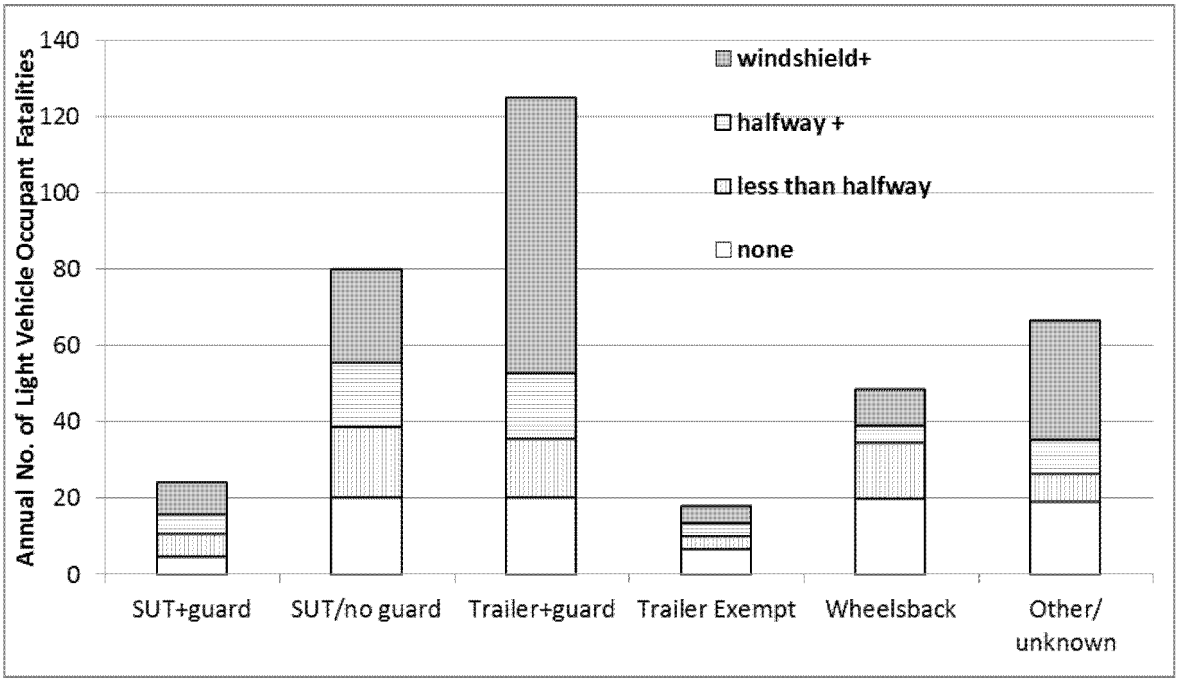
Figure A-4: Percentage of fatal light vehicle crashes into the rear of trailers and SUTs that resulted in passenger compartment intrusion - categorized by the relative speed of the crash, presence of rear impact guard, exclusion, and equipment in rear of vehicle.

Fatalities Associated With Light Vehicle Crashes Into the Rear of Trailers and SUTs

There are about 362 light vehicle occupant fatalities annually due to impacts into the rear of trailers and SUTs. Of these fatalities, 191 (53 percent) are in impacts with trailers, 104 (29 percent) are in impacts with SUTs, and 67 (18 percent) are impacts with an unknown truck type (Figure 5).

Among the 191 light vehicle occupant fatalities resulting from impacts with the rear of trailers, 125 occurred in impacts with trailers with rear impact guards while the remaining 66 were in impacts to trailers without guards (trailers excluded from a requirement to have a rear impact guard). PCI was associated with 86 annual light vehicle occupant fatalities resulting from impacts into the rear of trailers; 72 of these fatalities were in impacts with trailers with rear impact guards and 14 with trailers without guards (see Figure A–5).

Among the 104 light vehicle occupant fatalities resulting from impacts with the rear of SUTs, 80 occurred in impacts with SUTs without rear impact guards while the remaining 24 were in impacts to SUTs with guards. PCI was associated with 33 annual light vehicle occupant fatalities resulting from impacts into the rear of SUTs; 25 of these fatalities were in impacts with SUTs without rear impact guards and 8 with SUTs with guards (see Figure A–5).



	Light vehicle fatalities in crashes into the rear of trailers & SUTs		Light vehicle fatalities in PCI crashes into the rear of trailers & SUTs	
	Annual #	Percentage	Annual #	Percentage
SUT+guard	24	7%	8	5%
SUT/no guard	80	22%	25	17%
Trailer+guard	125	35%	72	48%
Trailer Exempt	18	5%	5	3%
Wheels back	48	13%	9	6%
Other/unknown	67	19%	31	21%
Total	362		150	

Figure A-5: Annual light vehicle occupant fatalities in impacts into the rear of trailers and SUTs categorized by the geometry of the rear of the impacted vehicle and the extent of underride.

Among light vehicle occupant fatalities in impacts into the rear of trailers and SUTs, approximately 60 percent were in vehicles with no underride, underride less than halfway or underride up to the hood without PCI. The agency found that in a number of TIFA cases reviewed, fatalities in non-PCI crashes into the rear of trailers and SUTs occurred due to occupants being unrestrained, other occupant characteristics (*e.g.* age), and other crash circumstances. Additionally, as shown in Figure A–4, 26 percent and 30 percent of light vehicle impacts with PCI into the rear of trailers and SUTs, respectively, had a relative velocity less than or equal to 56 km/h (35 mph). Since currently manufactured light vehicles are subject to FMVSS No. 208 requirements that ensure adequate occupant crash protection to restrained occupants in a 56 km/h (35 mph) rigid barrier frontal crash test, some light vehicle occupant fatalities in impacts into the rear of SUTs and trailers at speeds less than or equal to 56 km/h (35 mph) that resulted in PCI may be preventable if intrusion into the passenger compartment were mitigated.[78]

XII. Appendix B to Preamble: Summary of IIHS's Evaluation of Rear Impact Guards

In 2010, IIHS completed a review of the Large Truck Crash Causation Study (LTCCS)[79] database to evaluate fatal crashes of vehicles into the rear of heavy vehicles.[80] IIHS reviewed 115 LTCCS

[78] Some of the fatalities associated with PCI may also be due to unrestrained status of the occupant.

[79] *Supra.*

[80] Brumbelow, M.L., Blanar, L., "Evaluation of US Rear Underride Guard Regulation for Large Trucks

cases of vehicle underride into the rear of heavy vehicles and documented the presence and type of underride guard and performance of the guard in mitigating underride. Among the 115 cases reviewed, nearly half of the passenger vehicles had underride classified as severe or catastrophic. IIHS noted that for the cases involving trailers with rear impact guards, guard deformation or complete failure of the guard was frequent and commonly due to weak attachments, buckling of the trailer chassis, and bending of the lateral end of the guard under low overlap loading. IIHS stated that 57 percent of the heavy vehicles in the 115 LTCCS cases were excluded from FMVSS No. 224 requirements by the standard, among which a large proportion were wheels back vehicles and single unit trucks (SUTs) such as dump trucks. IIHS was not able to estimate the crash speeds in its review of the LTCCS cases.

Following the review, in 2011, IIHS conducted an initial round of crash tests in which the front of a model year (MY) 2010 Chevrolet Malibu (a midsize sedan) impacted the rear of trailers equipped with an underride guard.[81] A 50th percentile male Hybrid III dummy (HIII 50M) was in each of the front outboard seating positions of the Malibu. Three trailer/guard designs (2007 Hyundai, 2007 Vanguard, and 2011 Wabash trailers) were evaluated in various conditions. Each guard design was certified to FMVSS No. 223 requirements, and two (Vanguard and Wabash) also met the more stringent CMVSS No. 223 requirements. A 2010 Chevrolet Malibu was first crashed into a trailer at 56 km/h (35 mph) with full overlap (the overlap refers to the portion of the Malibu's width overlapping the underride guard). If the rear impact guard of a trailer model was successful in preventing passenger compartment intrusion in the full overlap crash test, a new Malibu was crashed into a new trailer of the same model with 50 percent overlap of the Malibu. If the rear impact guard was successful in preventing PCI in this case as well, a third test was performed with only 30 percent overlap of the Malibu.

The test results showed that the full overlap 56 km/h (35 mph) crash test of the Malibu with the guard of the Hyundai trailer (built to only FMVSS No. 223 requirements) resulted in catastrophic underride with PCI of the Chevrolet Malibu. The guard on the Vanguard trailer that complied with the upgraded CMVSS No. 223 rear impact guard requirements could not prevent PCI in a 56 km/h (35 mph) crash test with 50 percent overlap of the Malibu because the attachments of the guard to the trailer failed. The rear impact guard on the Wabash trailer, also certified to meet CMVSS No. 223 requirements, prevented PCI in 35 mph crash tests with full and 50 percent overlap of the Malibu, but could not prevent PCI in the crash test with 30 percent overlap.

Quasi-Static Load Testing of Rear Impact Guards

To compare the static performance of the guards, IIHS conducted quasi-static load tests using a 203 mm square force application device (similar to that specified in FMVSS No. 223) at P1 and P3 locations of the horizontal member of the rear impact guards on the Hyundai, Vanguard and Wabash trailers. The load was applied at a rate of 1.3 mm/sec until the force application device displaced 125 mm. Figure B–1 below shows the force-displacement curves for all three guards in the quasi-static test at the P3 location.

Deformation patterns of the underride guards varied substantially in the quasi-static tests. In the test at P3 location on the Hyundai guard, a peak force of 163,000 N was achieved and then the vertical support member of the Hyundai guard was pulled slowly from some of the bolts attaching it to the fixture, whereas the vertical member itself deformed only minimally. In the test at P3 of the Vanguard guard, the vertical member flexed for the first 50 mm of loading achieving a peak load of 257,000 N and then the attachment bolts began to shear, causing the measured force to drop below that measured for the Hyundai later in the test. The Wabash guard reached its peak force of 287,000 N earliest, and then the vertical member began buckling near its attachment to the horizontal member. As the buckling continued, the rear surface of the guard eventually bottomed out against the diagonal gusset, causing the load to increase again late in the test. The Hyundai rear impact guard absorbed 13,900 J of energy, the Vanguard guard absorbed 14,000 J of energy, and the Wabash guard absorbed 22,100 J of energy in the P3 point-load tests.

Using Real World Crashes.'' Proceedings of the 54th Stapp Car Crash Conference, 119–31, 2010. Warrendale, PA, SAE International.

[81] Brumbelow, M. L., ''Crash Test Performance of Large Truck Rear Impact Guards,'' 22nd International Conference on the Enhanced Safety of Vehicles (ESV), 2011. *http://www-nrd.nhtsa.dot.gov/pdf/esv/esv22/22ESV-000074.pdf.* Last accessed on April 2, 2015.

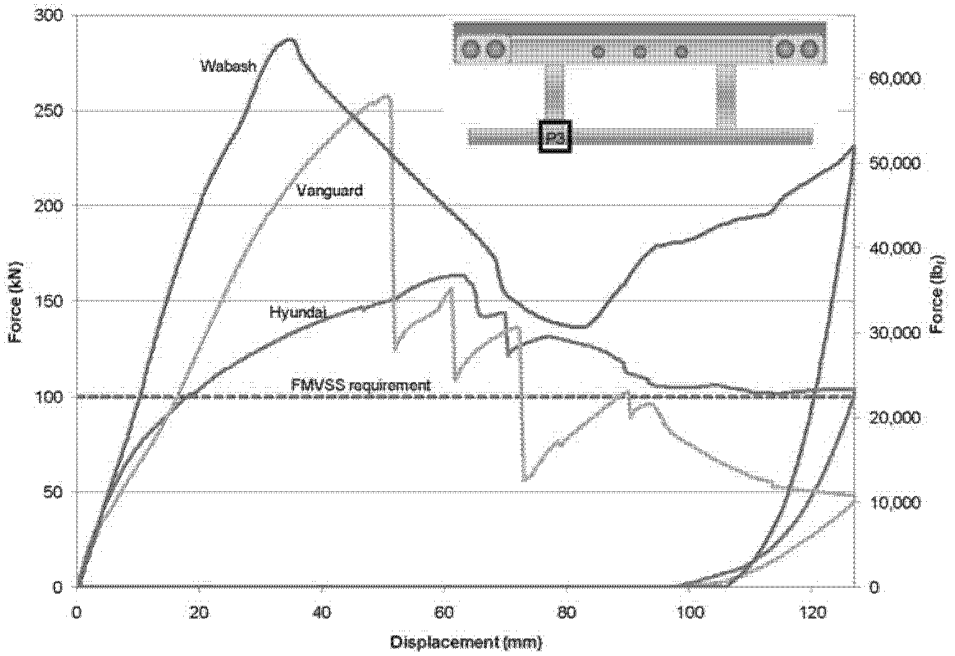


Figure B-1: IIHS quasi-static test at P3 of the 2007 Hyundai, 2007 Vanguard, and 2011 Wabash trailer rear impact guards.

Table B–1 summarizes the results of the initial five IIHS 56 km/h (35 mph) crash tests. In the first test, the 2007 Hyundai guard was ripped from the trailer's rear cross member early in the crash, allowing the Malibu to underride the trailer almost to the B-pillar. The heads of both dummies were struck by the hood of the Malibu as it deformed against the rear surface of the trailer. Under the same test conditions, the main horizontal member of the 2011 Wabash guard bent forward in the center but remained attached to the vertical support members, which showed no signs of separating from the trailer chassis.

TABLE B–1—RESULTS OF IIHS INITIAL ROUND OF 56 km/h CRASH TESTS OF THE 2010 CHEVROLET MALIBU INTO THE REAR OF TRAILERS

Conditions	Trailer	Guard performance	Underride	Max. longitudinal A-pillar deformation (cm)
100% overlap	2007 Hyundai	Attachments failed	Catastrophic	80
	2011 Wabash	Good	None	0
50% overlap	2007 Vanguard	Attachments failed	Severe	27
	2011 Wabash	End bent forward	None	6
30% overlap	2011 Wabash	End bent forward	Catastrophic	87

Table B–2 summarizes the peak injury measures [82] of the HIII 50M dummies in the front seating positions of the Malibu. For comparison purposes, Table B–2 also presents the HIII 50M dummy injury measures in the full frontal 56 km/h rigid barrier crash test of the 2010 Chevrolet Malibu conducted as part of NHTSA's New Car Assessment Program (NCAP). Head injury measures recorded by the dummies in the tests with severe underride were much higher than those reported for the Malibu's NCAP rigid wall test at the same speed. Chest acceleration and deflection measures were generally higher in tests without PCI than those with PCI.[83] The frontal air bag deployed in the 100, 50, and 30 percent overlap crash tests of the Malibu into the rear of the Wabash trailer. The driver and passenger injury measures in the Malibu full width crash test with the Wabash trailer (where the guard prevented PCI) was similar to the injury measures in the Malibu NCAP frontal crash test.

[82] HIII 50M dummy injury measures are those applicable to current model passenger vehicles as specified in FMVSS No. 208, see *http://www.ecfr.gov/cgi-bin/text-idx?SID=77e2aab5d088f2e9b46d15606090f9b0&node=se49.6.571_1208&rgn=div8*.

[83] When PCI was prevented by the rear impact guard, the accelerations on the vehicle are higher which results in higher chest injury measures.

Table B-2: IIHS initial round of testing – Injury measures of dummies in front seating positions of the Malibu

Test			Head Resultant acceleration (g)	Head Injury Criterion (15 ms)	Chest Resultant Acceleration (3 ms clip, g)	Chest Displacement (mm)	Left Femur Force (kN)	Right Femur Force (kN)
Injury Assessment Reference Values				**700**	**60 g**	**63 mm**	**10 kN**	**10 kN**
Full-width	Hyundai	*Driver*	128	754	21	19	0.3	0.3
		Passenger	107	557	14	20	0.1	0.1
	Wabash	*Driver*	54	328	36	38	2.2	1.2
		Passenger	50	319	36	37	2.3	1.8
	NCAP (rigid wall)	*Driver*	49	330	43	40	2.0	1.2
		Passenger	55	389	42	32	0.5	0.8
50% overlap	Vanguard	*Driver*	109	254	14	20	2.2	0
	Wabash	*Driver*	36	160	25	33	3.7	0.9
30% overlap	Wabash	*Driver*	130	880	37	16	0.6	0.1

Following the preliminary crash tests in 2011, IIHS conducted similar crash tests of a 2010 Chevrolet Malibu sedan with eight additional 2012 and 2013 model year trailers from various manufacturers, including newly redesigned Hyundai and Vanguard models. All guards in this round of testing were not only certified as complying with FMVSS No. 223 but were also certified as complying with CMVSS No. 223.

Table B–3 presents certification data from trailer manufacturers showing compliance with CMVSS No. 223. Only one trailer manufacturer utilized an option in CMVSS No. 223 to test using half the guard with a point load force application of 175,000 N at P3, while the other rear impact guards were certified with the uniform distributed quasi-static load application of 350,000 N on the full guard. All the rear impact guards tested also complied with the CMVSS requirement that the ground clearance of the guard after the test not exceed 560 mm.

Table B-3: Trailer manufacturers' certification data (CMVSS No. 223) of rear impact guards

	P1	P2	Uniform Distributed Load	Uniform (1/2 of guard)
Requirement :	**50 kN**	**50 kN**	**350 kN / 20 kJ**	**175 kN / 10 kJ**
Strick	50.7	50.5		233.4 kN / 18.9 kJ
Vanguard	*50	*50	370.1 kN / 25.3 kJ	
Hyundai/ Translead	51.6	53.6	367.5 kN / 37.5 kJ	
Stoughton	53.7	56	404.6 kN @ 101.6mm/ 31.2 kJ	
Great Dane	*50	*50	386.7 kN @ 125mm / 28.8 kJ	
Manac	55.1	55.8	37.5 kN / 25.0 kJ	

* Loaded until 50 kN reached

The ground clearance of the bumper (vertical distance of the bottom of the bumper from the ground) of the 2010 Chevrolet Malibu is 403 mm and the vertical height of the bumper is 124 mm. Therefore, the Malibu bumper is located at a vertical height between 403 mm and 527 mm above the ground with its centerline located 465 mm above ground. The vertical height of the top of the engine block from the ground is 835 mm. The ground clearance of the horizontal member of each rear impact guard ranged between 400 mm and 498 mm (Table B–4).

TABLE B–4—TRAILER GUARD GROUND CLEARANCE

Trailer	Guard ground clearance (mm)
2011 Wabash	445
2012 Manac	498
2012 Stoughton	477
2013 Great Dane	400

TABLE B–4—TRAILER GUARD GROUND CLEARANCE—Continued

Trailer	Guard ground clearance (mm)
2012–2013 Hyundai	409
2013 Strick	413
2013 Utility	455
2013 Vanguard	452

Table B–5, Table B–6, and Table B–7 present the extent of underride, deformation of the Malibu, performance of the guard, and whether there was PCI in the 56 km/h (35 mph) frontal impact crash tests of the Malibu into the rear of trailers with full overlap, 50 percent overlap, and 30 percent overlap of the Malibu, respectively.

All the rear impact guards on the trailers that were compliant with CMVSS No. 223 were able to prevent passenger compartment intrusion in full overlap crashes. In the tests with 50 percent overlap of the Malibu, all the guards except the 2013 Vanguard was able to prevent PCI. The Vanguard rear impact guard failed at the attachments where the bolts sheared off during the crash resulting in PCI of the Malibu. All the rear impact guards tested except the 2012 Manac guard were not able to prevent PCI in the 30 percent offset crash tests of the Malibu.

Table B-5: Rear impact guard performance in frontal impact crash tests of a 2010 Chevrolet Malibu into the rear of trailers with full overlap with the guard

2010 Chevrolet Malibu Into Trailer - Crash Test Results (100% Overlap @ 56 km/h)								
Trailer	**Guard Performance**			**PCI (due to underride)**	**Max. longitudinal deformation (cm)**		**Underride* (cm)**	**Peak Impulse (g at ms)**
	Overall	**Fastener Breakage**	**Material Failure**		**A-Pilar**	**Roof**		
2011 Wabash	Good	None	None	None	0	0	99	30g at 82ms
2012 Manac	Good	Some	None	None**	0	0	135	18g at 101ms
2012 Stoughton	Good	None	None	None	0	0	117	25g at 85ms
2013 Great Dane	Good	None	None	None	0	0	96	21g at 109ms
2012 Hyundai	Good	None	None	None	0	0	92	23g at 49ms
2013 Strick	Good	None	None	None**	0	0	121	26g at 93ms
2013 Utility	Good	None	None	None	0	0	99	30g at 47ms
2013 Vanguard	Good	Some	Some Tearing	None**	0	0	94	34g at 80ms
**Calculated by relative center of mass positions collected at initial impact and maximum displacement.*								
*** Windshield shattered*								

Table B-6: Rear impact guard performance in frontal impact crash tests of a 2010 Chevrolet Malibu into the rear of trailers with 50 percent overlap with the guard

2010 Chevrolet Malibu Into Trailer - Crash Test Results (50% Overlap @ 56 km/h)								
Trailer	**Guard Performance**			**PCI (due to underride)**	**Max. longitudinal deformation (cm)**		**Underride* (cm)**	**Peak Impulse (g at ms)**
	Overall	**Fastener Breakage**	**Material Failure**		**A-Pilar**	**Roof**		
2011 Wabash	Good	None	None	None**	6	None	135	19g at 95ms
2012 Manac	Good	None	None	None**	0	None	129	19g at 50ms
2012 Stoughton	Good	None	None	None**	11	None	147	14g at 66ms
2013 Great Dane	Good	Some	None	None**	0	None	152	14g at 97ms
2013 Hyundai	Good	None	None	None**	0	None	116	16g at 49ms
2013 Strick	Good	None	None	None**	15	None	146	15g at 80ms
2013 Utility	Good	None	None	None**	5	None	139	18g at 58ms
2013 Vanguard	Fail (fully detached)	Extensive	Extensive	Trailer rear sill directly contacted dummy head	146	Extensive	205	17g at 48ms
**Calculated by relative center of mass positions collected at initial impact and maximum displacement.*								
***Windshield shattered*								

Table B-7: Rear impact guard performance in frontal impact crash tests of a 2010 Chevrolet Malibu into the rear of trailers with 30 percent overlap with the guard

2010 Chevrolet Malibu Into Trailer - Crash Test Results (30% Overlap @ 56 km/h)								
Trailer	Guard Performance			PCI (due to underride)	Max. longitudinal deformation (cm)		Underride* (cm)	Peak Impulse (g at ms)
	Overall	Fastener Breakage	Material Failure		A-Pilar	Roof		
2011 Wabash	Fail	None	None	Extensive***	87	33	242	Not Reported
2012 Manac	Good	Some	None	None**	5	None	160	17g at 66ms
2012 Stoughton	Fail	None	None	Extensive***	89	Extensive	218	12g at 144ms
2013 Great Dan	Fail	None	None	Extensive***	111	Extensive	244	18g at 151ms
2013 Hyundai	Fail	None	None	Extensive***	112	Extensive	242	18g at 200ms
2013 Strick	Fail	None	None	Extensive***	117	Extensive	245	16g at 202ms
2013 Utility	Fail	None	None	Extensive***	123	Extensive	237	10g at 225ms
2013 Vanguard	*Not tested due to failure of 50% overlap test at 56kph*							
**Calculated by relative center of mass positions collected at initial impact and maximum displacement.*								
***Windshield shattered*								
****Trailer rear sill directly contacted dummy head*								

Table Table B–8 presents the injury measures of crash test dummies (HIII–50M) in the driver and front passenger seating positions in 56 km/h (35 mph) crash tests conducted by IIHS with 100 percent overlap of the 2010 Malibu with rear impact guard.

Table B–9 and Table B–10 present the injury measures for the HIII–50M in the driver position in 56 km/h (35 mph) crash tests with 50 percent and 30 percent overlap of the 2010 Malibu with the rear impact guard, respectively.

The frontal air bags deployed in all the 100 percent and 50 percent overlap crash tests of the Malibu into the rear of 2011–2013 model year trailers. The air bag deployed in the 30 percent overlap crash tests of the Malibu into the rear of 2011–2013 model year trailers except for the tests into the rear of the 2012 Hyundai, 2013 Great Dane, and 2013 Strick trailer. When the Malibu experienced PCI in a crash test, the dummy injury measures, specifically the head injury criterion (HIC) and the neck injury criterion (Nij) generally exceeded the allowable Injury Assessment Reference Values (IARV) of 700 and 1.0 set forth in FMVSS No. 208, respectively, regardless of whether the air bag deployed.[84] When PCI was prevented by the rear impact guard, the accelerations on the vehicle are higher which results in higher chest deflection measures, although well within the allowable level, indicating higher acceleration loads on the dummy.

[84] Except in the neck injury measure (Nij = 0.65) in the 50 percent overlap crash with the Vanguard trailer.

Table B-8: Dummy injury measures in frontal impact crash tests of a 2010 Chevrolet Malibu into the rear of trailers with full overlap with the rear impact guard

2010 Chevrolet Malibu Into Trailer - Driver HIII 50M Injury Measures (100% overlap @ 56 km/h)						
Trailer	Driver			Passenger		
	HIC-15 (700)	Max N_{ij} (1.00)	Rib Compression (63mm)	HIC-15 (700)	Max N_{ij} (1.00)	Rib Compression (63mm)
2011 Wabash	328	0.33 Tension-Flexion	38	319	0.35 Compression-Extension	37
2012 Manac	206	0.28 Tension-Flexion	35	143	0.38 Tension-Flexion	37
2012 Stoughton	267	0.37 Tension-Flexion	40	265	0.37 Tension-Flexion	37
2013 Great Dane	49	0.22 Tension-Extension	32	65	0.16 Compression-Extension	35
2012 Hyundai	54	0.22 Tension-Flexion	39	110	0.20 Tension-Flexion	35
2013 Strick	107	0.26 Tension-Flexion	39	125	0.32 Tension-Flexion	37
2013 Utility	130	0.25 Tension-Flexion	37	173	0.33 Tension-Flexion	33
2013 Vanguard	212	0.31 Tension-Flexion	35	237	0.40 Tension-Flexion	31

Table B-9: Dummy injury measures in frontal impact crash tests of a 2010 Chevrolet Malibu into the rear of trailers with 50 percent overlap with the rear impact guard

2010 Chevrolet Malibu Into Trailer - Driver HIII 50M Injury Measures (50% overlap @ 56 km/h)			
Trailer	HIC-15 (700)	Max N_{ij} (1.00)	Rib Compression (63mm)
2011 Wabash	101	0.23 Tension-Flexion	33
2012 Manac	38	0.13 Tension-Flexion	29
2012 Stoughton	65	0.17 Tension-Flexion	25
2013 Great Dane	78	0.24 Tension-Flexion	28
2013 Hyundai	155	0.35 Compression-Extension	32
2013 Strick	163	0.18 Tension-Flexion	27
2013 Utility	37	0.17 Tension-Flexion	30
2013 Vanguard	1954	0.35 Compression-Flexsion	21

Table B-10: Dummy injury measures in frontal impact crash tests of a 2010 Chevrolet Malibu into the rear of trailers with 30 percent overlap with the rear impact guard

2010 Chevrolet Malibu Into Trailer - Driver HIII 50M Injury Measures (30% overlap @ 56 km/h)			
Trailer	HIC-15 (700)	Max N_{ij} (1.00)	Rib Compression (63mm)
2011 Wabash	880	1.16 Tension-Extension	16
2012 Manac	58	0.28 Tension-Flexion	31
2012 Stoughton	9069	1.23 Tension-Extension	14
2013 Great Dane	8708	2.45 Tension-Extension	16
2013 Hyundai	7346	1.94 Tension-Extension	19
2013 Strick	7742	2.38 Compression-Flexsion	19
2013 Utility	7415	2.55 Tension-Extension	17
2013 Vanguard	*Not tested due to failure of 50% overlap test at 56 km/h*		

Summary of the IIHS Test Data

The test data, summarized in Table B–11 and Table B–12 below, show that trailer guards compliant with FMVSS No. 223 were unable to withstand an impact of the Malibu at 56 km/h (35 mph), which resulted in PCI. The tests also demonstrated that trailers that comply with the Canadian standard, CMVSS No. 223, were generally able to prevent PCI in 56 km/h (35 mph) impacts of the Malibu with full and 50

percent overlap with the rear impact guard. However, seven of the eight rear impact guards compliant with the Canadian standard could not prevent PCI when only 30 percent of the Malibu front end engaged the rear impact guard.

In a quasi-static test at P3 location of the Vanguard rear impact guard, the attachments bolts sheared but still enabled the vehicle to meet the load and energy absorption requirements of CMVSS No. 223. However, in the 56 km/h (35 mph) crash test with 50 percent overlap of the 2010 Malibu with the Vanguard trailer, the guard bolts sheared resulting in PCI of the Malibu. In the tests where there was no PCI of the Malibu, the injury measures of the restrained test dummies in the Malibu were below the injury threshold levels used by the FMVSSs. When PCI was prevented by the rear impact guard, generally higher chest injury measures resulted compared to when PCI occurred, but the values were well within the allowable limits.

When the Malibu sustained PCI, the head and neck injury measures were generally greater than the allowable threshold levels indicating high risk of serious head and neck injuries, regardless of whether the air bag deployed. The IIHS tests showed that when PCI occurs, air bag deployment does not improve injury outcome.

TABLE B–11—OCCURRENCE OF PCI IN 35 MPH CRASH TESTS (CONDUCTED BY IIHS) OF THE 2010 CHEVROLET MALIBU INTO THE REAR OF TRAILERS

Trailer Model	Designed to	Full Width	50% overlap	30% overlap
2011 Wabash	CMVSS No. 223	None	None	Yes.
2012 Manac	CMVSS No. 223	None	None	None.
2012 Stoughton	CMVSS No. 223	None	None	Yes.
2013 Great Dane	CMVSS No. 223	None	None	Yes.
2012–2013 Hyundai	CMVSS No. 223	None	None	Yes.
2013 Strick	CMVSS No. 223	None	None	Yes.
2013 Utility	CMVSS No. 223	None	None	Yes.
2013 Vanguard	CMVSS No. 223	None	Yes *	N/A.
2007 Hyundai	FMVSS No. 224	Yes	N/A **	N/A.

* The attachment of the guard to the trailer failed during impact.
** Since the guard was unable to withstand the loads in the first test, the second and third tests were not conducted.

Table B-12: Summary of IIHS's frontal impact crash tests of a 2010 Chevrolet Malibu into the rear of trailers

Trailer	Compliance	Overlap/Underride		Injury			
	P_3 Peak Force (kN) Energy Absorbed (kJ)	**Overlap**	**Underride* (cm)**	**HIC-15 (700)**	**Max N_{ij}** (1.00)**		**Rib Compression (63mm)**
2011 Wabash	287 kN / 22.1 kJ (point load)	100%	99	328	0.35	Compression-Extension	37
		50%	135	101	0.23	Tension-Flexion	33
		30%	242	880	1.16	Tension-Extension	16
2012 Manac	361.8 kN / 25.0 kJ (distributed load)	100%	135	206	0.38	Tension-Flexion	37
		50%	129	38	0.13	Tension-Flexion	29
		30%	160	58	0.28	Tension-Flexion	31
2012 Stoughton	404.6 kN / 31.2 kJ (distributed load)	100%	117	267	0.37	Tension-Flexion	37
		50%	147	65	0.17	Tension-Flexion	25
		30%	218	9069	1.23	Tension-Extension	14
2013 Great Dane	386.7 kN / 28.8 kJ (distributed load)	100%	96	49	0.16	Compression-Extension	35
		50%	152	78	0.24	Tension-Flexion	28
		30%	244	8708	2.45	Tension-Extension	16
2012 - 2013 Hyundai	367.5 kN / 37.5 kJ (distributed load)	100%	92	54	0.2	Tension-Flexion	35
		50%	116	155	0.35	Compression-Extension	32
		30%	242	7346	1.94	Tension-Extension	19
2013 Strick	233.4 kN / 18.9 kJ (½ guard)	100%	121	107	0.32	Tension-Flexion	37
		50%	146	163	0.18	Tension-Flexion	27
		30%	245	7742	2.38	Compression-Flexsion	19
2013 Utility	Not Available	100%	99	130	0.33	Tension-Flexion	33
		50%	139	37	0.17	Tension-Flexion	30
		30%	237	7415	2.55	Tension-Extension	17
2013 Vanguard	370.1 kN / 25.3 kJ (distributed load)	100%	94	212	0.4	Tension-Flexion	31
		50%	205	1954	0.65	Compression-Flexsion	21
		30%	*Not tested due to failure of 50% overlap test at 56 km/h*				
2007 Hyundai	163 kN / 13.9 kJ Point Load	100%	catastrophic	754		NA	19
		50%	*Not tested due to failure of 100% overlap test at 56 km/h*				
		30%	*Not tested due to failure of 100% overlap test at 56 km/h*				

*Calculated by relative center of mass positions collected at initial impact and maximum displacement.

**For 100% overlap only the driver dummy is presented for comparison to 50% and 30% overlap scenarios.

Issued under authority delegated in 49 CFR 1.95.

Raymond R. Posten,

Associate Administrator for Rulemaking.

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Part IV

Department of Agriculture

Animal and Plant Health Inspection Service

9 CFR Parts 50, 51, et al.
Brucellosis and Bovine Tuberculosis; Update of General Provisions; Proposed Rule

DEPARTMENT OF AGRICULTURE

Animal and Plant Health Inspection Service

9 CFR Parts 50, 51, 71, 76, 77, 78, 86, 93, and 161

[Docket No. APHIS–2011–0044]

RIN 0579–AD65

Brucellosis and Bovine Tuberculosis; Update of General Provisions

AGENCY: Animal and Plant Health Inspection Service, USDA.

ACTION: Proposed rule.

SUMMARY: We are proposing to consolidate the regulations governing bovine tuberculosis, and those governing brucellosis. As part of this consolidation, we are proposing to transition the tuberculosis and brucellosis programs away from a State classification system based in disease prevalence. Instead, States and Tribes would implement animal health plans that identify sources of the diseases within the State or Tribal lands and specify mitigations to address the risk posed by those sources. The consolidated regulations would also set forth standards for surveillance, epidemiological investigations, and affected herd management that must be incorporated into each animal health plan, with certain limited exceptions; would provide revised conditions for the interstate movement of cattle, bison, and captive cervids; and would provide revised conditions for APHIS approval of tests, testing laboratories, and testers for bovine tuberculosis or brucellosis. Finally, we are proposing to revise the bovine tuberculosis- and brucellosis-related import requirements for cattle and bison to make these requirements clearer and assure that they more effectively mitigate the risk of introduction of these diseases into the United States.

DATES: We will consider all comments that we receive on or before March 15, 2016.

ADDRESSES: You may submit comments by either of the following methods:

- *Federal eRulemaking Portal:* Go to: *http://www.regulations.gov/#!docketDetail;D=APHIS-2011-0044.*
- *Postal Mail/Commercial Delivery:* Send your comment to Docket No. APHIS–2011–0044, Regulatory Analysis and Development, PPD, APHIS, Station 3A–03.8, 4700 River Road Unit 118, Riverdale, MD 20737–1238.

Supporting documents and any comments we receive on this docket may be viewed at *http://www.regulations.gov/#!docketDetail;D=APHIS-2011-0044* or in our reading room, which is located in room 1141 of the USDA South Building, 14th Street and Independence Avenue SW., Washington, DC. Normal reading room hours are 8 a.m. to 4:30 p.m., Monday through Friday, except holidays. To be sure someone is there to help you, please call (202) 799–7039 before coming.

FOR FURTHER INFORMATION CONTACT: *Domestic regulatory provisions:* Dr. C. William Hench, Senior Staff Veterinarian, Ruminant Health Programs, VS, APHIS, 2150 Centre Avenue, Building B–3E20, Fort Collins, CO 80526–8117; (970) 4947378. *Import-related regulatory provisions:* Dr. Langston Hull, National Import Export Services, VS, APHIS, 4700 River Road Unit 39, Riverdale, MD 20737; (301) 851–3300.

SUPPLEMENTARY INFORMATION:

Background

I. Purpose of the Regulatory Action

a. Need for the Regulatory Action

Bovine tuberculosis is a contagious and infectious granulomatous disease caused by the bacterium *Mycobacterium bovis.* Although commonly defined as a chronic debilitating disease, bovine tuberculosis can occasionally assume an acute, rapidly progressive course. While any body tissue can be affected, lesions are most frequently observed in the lymph nodes, lungs, intestines, liver, spleen, pleura, and peritoneum. Although cattle are considered to be the true hosts of *M. bovis,* the disease has been reported in several other species of livestock, most notably bison and captive cervids. There have also been instances of infection in other domestic and nondomestic animals, as well as in humans.

Brucellosis is a contagious disease, caused by bacteria of the genus *Brucella,* that affects both animals and humans. The disease mainly affects cattle, bison, and swine; however, goats, sheep, horses, and humans are susceptible as well. In its principal animal hosts, it causes loss of young through spontaneous abortion or birth of weak offspring, reduced milk production, and infertility. There is no economically feasible treatment for brucellosis in livestock. In humans, brucellosis initially causes flu-like symptoms, but the disease may develop into a variety of chronic conditions, including arthritis. Humans can be treated for brucellosis with antibiotics.

These diseases were widely prevalent in the United States during the early 1900s. As recently as 1917, 1 in 20 cattle herds within the United States was affected with bovine tuberculosis, and, in 1934, 1 in 10 adult cattle within the United States was a reactor (*i.e.,* tested positive) for brucellosis.

Such prevalence prompted the establishment of a National Cooperative State/Federal Eradication Program for bovine tuberculosis (referred to below as the bovine tuberculosis program) and a National Cooperative State/Federal Eradication Program for brucellosis (referred to below as the brucellosis program). The programs sought to eradicate the diseases from the nation's cattle herds by quickly responding to brucellosis and bovine tuberculosis outbreaks, identifying and quarantining affected herds, and depopulating these herds. To foster producer compliance with herd depopulation, the United States Department of Agriculture (USDA) regularly compensated the owners of depopulated herds.

In support of these programs, USDA issued regulations. These regulations established State classification systems for brucellosis and bovine tuberculosis based on disease prevalence within a State. The regulations further required that these prevalence levels be supported by surveillance (inspection and periodic testing) of cattle within the State and specified that, for a State to maintain its classification, affected herds within a State had to be depopulated within a certain period of time. Finally, the regulations specified testing requirements and movement restrictions for cattle moved interstate from certain classes of States.

Since their inception, these regulatory programs have proven extremely successful in reducing the prevalence of brucellosis and bovine tuberculosis within the United States. Based on routine inspection conducted by USDA's Food Safety Inspection Service (FSIS) of cattle slaughtered at slaughtering establishments, brucellosis currently affects less than 0.001 percent of all domestic program herds, and bovine tuberculosis less than 0.001 percent of all such herds. Under the standards of the World Organisation for Animal Health (OIE), these prevalence levels, excluding consideration of other OIE standards, are, in and of themselves, consistent with a ''free'' status for brucellosis and bovine tuberculosis.

However, in recent years, several factors have arisen to impede our brucellosis and bovine tuberculosis eradication efforts. First, reservoirs of brucellosis and bovine tuberculosis have been identified in wildlife populations in certain areas of the

country. These affected wildlife populations pose a risk of transmitting brucellosis or bovine tuberculosis to livestock in the areas on a recurring basis, potentially resulting in brucellosis and bovine tuberculosis becoming endemic in livestock in certain areas of the country.

Second, since USDA established regulatory programs for brucellosis and bovine tuberculosis, the cattle industry within the United States has changed substantially, and other ruminant industries have arisen. Cattle producers have increasingly relied on imported cattle to supplement their domestically raised stock, exposing the domestic herd to animals that originate from regions with diverse risk statuses. Cattle herd sizes have increased significantly, and market channels have become increasingly complex. Additionally, producers of bison and captive cervids, two species that are also susceptible to brucellosis and bovine tuberculosis, have established industries, and interstate movement of bison and captive cervids has increased accordingly.

These industry changes have led us to reevaluate the programs' traditional reliance on whole herd depopulation as the sole means of managing affected herds. As the prevalence levels for brucellosis and bovine tuberculosis have decreased within the United States, funds allocated to Federal and State departments of agriculture to indemnify the owners of depopulated herds have similarly decreased. As a result, because of current herd sizes, which are often significantly larger than when the programs were established, if brucellosis or bovine tuberculosis is detected in a herd and the herd is depopulated, it is often difficult, if not impracticable, to indemnify the owner for all animals that are destroyed. Similarly, because of current marketing practices, USDA has become increasingly aware of the impacts on local and regional markets that may be caused by whole herd depopulation of a large herd. Accordingly, in the past decade, USDA has evaluated the efficacy of other methodologies to deal with affected herds.

In 2009, USDA's Animal and Plant Health Inspection Service (APHIS) issued concept papers that outlined these factors and suggested several modifications to the brucellosis and bovine tuberculosis programs that would address the factors. Suggested modifications included:

- Crafting national surveillance plans for the programs to target areas within the United States where prevalence levels may be higher than the national average.
- Enhancing existing efforts to mitigate disease transmission from wildlife to livestock.
- Developing regulatory alternatives to whole-herd depopulation.

The comment period for each concept paper was 60 days. By the close of the comment period for the brucellosis concept paper, we had received 344 comments, from State departments of agriculture, advocacy groups, livestock producers, and private citizens. By the close of the comment period for the bovine tuberculosis concept paper, we had received 73 comments, from State departments of agriculture, representatives for foreign governments, advocacy groups, representatives for the cattle industry within the United States, cattle producers, and private citizens. While several commenters expressed concern regarding some of the suggested modifications, commenters did not present information that called into question the approaches presented in the two documents.

Accordingly, APHIS subsequently issued a rule and order that modified aspects of the brucellosis and bovine tuberculosis programs in accordance with the concept papers. In April 2010, APHIS issued a Federal Order [1] that allows States to retain the highest bovine tuberculosis classification, accredited-free, regardless of the number of affected herds in the State, provided that all affected herds in the State that are not depopulated are quarantined; an affected herd plan is developed for each of these herds to prevent the spread of tuberculosis; the herds are subject to periodic testing and animals that do not test negative are destroyed; and the State conducts sufficient surveillance to identify tuberculosis in other animals. Since most States had accredited-free status at the time the order was issued, the order was meant, in part, to result in depopulation no longer being considered the sole means of dealing with affected herds within the bovine tuberculosis program.

On December 27, 2010, APHIS published an interim rule [2] in the **Federal Register** (75 FR 81090–81096, Docket No. APHIS–2009–0083). Among other things, this rule required States with the highest classification for brucellosis, Class Free, that also have brucellosis in wildlife to develop and implement a brucellosis management plan approved by APHIS that specifies surveillance and mitigation measures for these wildlife reservoirs. The interim rule was intended, in part, to couple the brucellosis program's traditional focus on response to disease in domestic herds with a new focus on sources of disease introduction.

Concurrent with the issuance of this order and rule, APHIS also formed a bovine tuberculosis/brucellosis working group. The working group, composed of Federal, State, and Tribal representatives, was tasked with crafting a regulatory framework for consolidating the brucellosis and bovine tuberculosis programs into a single, streamlined program. Using the concept papers, the April 2010 Federal Order, and the December 2010 interim rule as reference points, and after extended discussion and dialogue with stakeholders, the working group drafted a framework comprising eight elements, or interrelated regulatory concepts: Program (State) requirements; zoning; surveillance; affected herd management and epidemiological investigations; indemnity; interstate movement controls; importation requirements; and approval procedures related to official tests and laboratories. On May 5, 2011, APHIS made the draft regulatory framework document available on Regulations.gov for review and comment.[3]

We took comment on the draft regulatory framework document for 60 days, ending July 5, 2011. We received 37 comments by that date. They were from State departments of agriculture, an organization representing dairy cattle producers throughout the United States, organizations representing the cattle industry, a wildlife conservation organization, and several private citizens. Based on the draft regulatory framework document and the comments we received, we have developed and are issuing this proposed rule.

However, in response to comments received on the framework document and ongoing discussion with stakeholders, this proposed rule does not include several of the regulatory requirements suggested in the framework. We discuss significant divergences immediately below, by element.

Element 1, State (Program) Requirements, suggested creating a control or advisory board of Federal, State, and Tribal experts to provide APHIS with recommendations regarding

[1] To view the Federal Order, go to *http://digitalcommons.unl.edu/cgi/viewcontent.cgi?article=1031&context=michbovinetb.*

[2] To view the interim rule, go to *http://www.regulations.gov/#!documentDetail;D=APHIS-2009-0083-0001.*

[3] To view the framework or the comments we received, go to *http://www.regulations.gov/#!docketDetail;D=APHIS-2011-0044.*

State compliance with regulatory requirements as well as recommendations regarding State status classifications.

Many commenters supported the establishment of such a board, but stated that the board should have industry representation. The commenters put forth a number of scenarios in which industry personnel would have specialized expertise that Federal, State, and Tribal personnel would not possess.

We agree that industry personnel often possess such technical expertise, and foresee circumstances where we may need to solicit such expertise under a consolidated brucellosis and tuberculosis program. However, a board with industry representation that provides general recommendations to APHIS would be considered an advisory committee under the Federal Advisory Committee Act (5 U.S.C., appendix, FACA), and would thus be subject to the requirements of that Act. FACA requires advisory committees to follow an extensive protocol before convening a meeting of the committee, and this protocol could, in certain instances, preclude the advisory board from providing APHIS with timely advice regarding program activities.

Accordingly, instead of an advisory board, APHIS would solicit the opinion of technical experts at the Federal, State, Tribal, and industry level as circumstances warrant under the consolidated brucellosis and bovine tuberculosis program.

Element 2, Zoning, suggested that, if reservoirs of bovine tuberculosis or brucellosis are identified in an area of the United States and the outbreak cannot be eradicated within 1 year, then zoning the area for the disease or diseases should be considered as a management method. It further suggested that, if zoning is pursued, the zones should not be limited by geopolitical boundaries unless warranted.

A number of State departments of agriculture pointed out that their jurisdiction over matters of livestock health ends at State boundaries. The commenters expressed concern that, if a single zone was composed of areas in multiple States, and one of the States failed to adhere to the requirements of the regulations, all of States would be subject to remedial measures, even though the other States have no jurisdiction over the activities conducted in that State.

In light of the commenters' concerns, while this proposed rule does allow for zones, which we term recognized management areas, States would request recognition of those areas within their particular State, and the boundaries of the recognized management area would not extend beyond State borders.

Element 5, Indemnity, proposed streamlining the process for the payment of indemnity for animals destroyed because of brucellosis or bovine tuberculosis by means of an appraisal calculator.

Several commenters supported the use of such a calculator in theory, but stated that they would need to see a demonstration of such a calculator in order to assess its accuracy and viability as a means of appraisal.

We agree that streamlining the indemnity regulations in the manner proposed in the framework document presupposes deployment of such a calculator. Since the calculator is still being developed and tested, we have decided not to propose to modify the indemnification process in the manner suggested by the framework document in this proposed rule. As a result, this proposed rule would not modify current indemnity practices, which rely on fair market value as determined by an appraiser, for bovine tuberculosis, and on either a fixed rate or fair market value as determined by an appraiser, for brucellosis.

Finally, element 7, Import Requirements, set forth a number of suggested post-entry requirements for ruminants imported into the United States to address the risk that such ruminants may pose of introducing brucellosis or bovine tuberculosis into the United States.

Several commenters suggested that, in light of our limited resources, APHIS would be better served by evaluating our existing import requirements for ruminants to determine whether, in every instance, they mitigate the risk of introduction of brucellosis or bovine tuberculosis.

We have conducted such a risk evaluation. We have concluded that the current import requirements do not always mitigate such risk, and are proposing to amend them accordingly.

Legal Authority for the Regulatory Action

Under the Animal Health Protection Act (AHPA, 7 U.S.C. 8301 *et seq.*), the Secretary of Agriculture has the authority to issue orders and promulgate regulations to prevent the introduction into the United States and the dissemination within the United States of any pest or disease of livestock. APHIS' regulations in 9 CFR chapter I, subchapter C contain requirements for the interstate movement of livestock to prevent the dissemination of diseases of livestock within the United States. APHIS' regulations in 9 CFR chapter I, subchapter D contain requirements for the importation of livestock to prevent the introduction or dissemination of diseases of livestock into the United States.

II. Summary of the Major Provisions of the Proposed Rule

This proposed rule would remove the regulations governing the bovine tuberculosis program, currently found in 9 CFR part 77, and those governing the aspects of the brucellosis program that pertain to cattle and bison, currently found in 9 CFR part 78, subparts B and C. In their place, it would add a new part to the regulations, 9 CFR part 76. This part, which would be titled ''Part 76—Brucellosis and Bovine Tuberculosis,'' would contain regulations governing a national program designed to eradicate both diseases from cattle, bison, and captive cervids (''program animals'') in the United States.

As the regulations in 9 CFR parts 77 and 78 currently do, these proposed regulations would provide a system to classify States for brucellosis and bovine tuberculosis. However, the classification system would no longer be based on the prevalence level of these diseases within a State. Rather, the system would be based on whether a State has drafted an animal health plan to address the diseases, whether APHIS has approved this plan, and whether the State has implemented and is maintaining the activities specified within the plan. We would also allow Tribes to submit plans and request brucellosis and bovine tuberculosis statuses apart from the State in which their Tribal lands are located. In order for APHIS to have adequate assurances that States and Tribes have implemented and are maintaining the activities and measures specified in their plan, the classification system would also be based, in part, on regular and timely submission of reports regarding these activities and measures.

In an animal health plan, the State or Tribe would have to specify whether any known sources of brucellosis or bovine tuberculosis exist within the State or Tribal lands; this is no change from current obligations within the brucellosis and bovine tuberculosis programs with regard to alerting APHIS when new sources of brucellosis or bovine tuberculosis are discovered in State or Tribal lands. If there are known sources of those diseases in the State or Tribal lands, the State or Tribe would have to conduct surveillance of those sources and of the cattle, bison, or captive cervids that may come in

contact with the sources, and would have to specify mitigations that address the risk of disease spread to these at-risk populations.

Regardless of whether there are known sources of disease in the State or Tribal lands, States and Tribes would also have to provide APHIS with demographics regarding cattle, bison, and captive cervids within the State, a list of personnel assigned to implement and perform activities and maintain and enforce measures associated with their animal health plans, and confirmation that the State or Tribe has a legal and regulatory basis for the activities specified within the animal health plan. Additionally, States or Tribes would have to agree to conduct epidemiological investigations and affected herd management in accordance with the protocols set forth in the sections of the regulations that would pertain to these activities, or would have to submit an alternate method to APHIS for evaluation and approval.

The proposed rule includes protocols for epidemiological investigations into an investigation of individual cattle, bison, or captive cervids that have had non-negative test results for brucellosis. This proposal includes protocols for four types of epidemiological investigations:

- Investigations arising because individual cattle, bison, or captive cervids have been determined to be infected with brucellosis or bovine tuberculosis;
- Investigations arising because a herd of cattle, bison, or captive cervids has been determined to be affected with brucellosis or bovine tuberculosis;
- Investigations arising because animals other than cattle, bison, or captive cervids have been determined to be infected with brucellosis or bovine tuberculosis, and cattle, bison, or captive cervids in the area surrounding these animals have been determined by APHIS to be at-risk because of exposure to this source; and
- Investigations arising because brucellosis or bovine tuberculosis has been detected at a calf raiser or feedlot, where cattle or bison from disparate premises of origin are brought together for feeding purposes.

States and Tribes could manage affected herds through whole-herd depopulation or a test-and-remove protocol. The minimum standards for a test-and-remove protocol would be similar to those found in the April 2010 Federal Order.[4]

States and Tribes would have the option of requesting recognition of a management area within the State or Tribal lands. The management area would be a clearly delineated geographical area of the State or Tribal lands in which the State or Tribe has detected brucellosis or bovine tuberculosis, in which the State or Tribe has determined that there is a risk of transmission of brucellosis or bovine tuberculosis to program animals, and in which the State or Tribe has taken or proposes to take measures to control the spread of the brucellosis or bovine tuberculosis within and from the area and/or to eradicate the disease within the area. These measures would have to include restrictions on the movement of cattle, bison, and captive cervids from the recognized management area, as well as certain other measures. Recognized management areas would allow States and Tribes to designate certain areas of the State or Tribal lands as posing a greater risk of brucellosis and bovine tuberculosis spread than other areas within the State or Tribal lands, without risking a possible redesignation of the State or Tribe to a lower State or Tribal classification.

The regulations would also provide conditions for the interstate movement of cattle, bison, and captive cervids. Except for cattle and bison that belong to certain, high-risk categories, the conditions for interstate movement of most cattle and bison would be based on the status of the State or Tribe from which the cattle or bison are moved. Cattle and bison from a State or Tribe with the lowest status would be considered to pose a substantial risk of transmitting brucellosis and/or bovine tuberculosis, and thus would be subject to testing prior to interstate movement.

Captive cervids would be subject to testing for both brucellosis and bovine tuberculosis prior to interstate movement, regardless of the status of the State or Tribe from which they are moved. Such testing would be necessary because FSIS does not currently conduct slaughter inspection of captive cervids and because the actual prevalence of brucellosis and bovine tuberculosis within the domestic captive cervid industry are largely unknown.

Finally, the proposed rule would revise the conditions for the importation of cattle and bison that are contained in 9 CFR part 93 and that address the risk the imported cattle or bison may pose of disseminating brucellosis or bovine tuberculosis. The current regulations, which may be divided into requirements that are generally applicable to most exporting countries and country-specific requirements that are applicable to Canada, Mexico, and Ireland, do not account for changes in disease programs or disease prevalence that could increase or decrease the risk of spread of brucellosis or bovine tuberculosis posed by the importation of cattle or bison from foreign regions.

Accordingly, we evaluated this risk to determine whether to modify the current regulations, and, if so, how. The risk evaluation examines two possible modifications: (1) Adopting international standards developed by the OIE or (2) applying the U.S. prevalence-based requirements delineated in the current Uniform Methods and Rules[5] for the bovine tuberculosis and brucellosis programs within the United States to the importation of bovines from foreign regions.

The risk evaluation finds that, based on current import practices, both the OIE standards and our domestic requirements could help mitigate to a certain extent the risk that cattle and bison imported into the United States may present of spreading brucellosis or bovine tuberculosis. However, only the domestic requirements, applied to foreign regions, would reduce such risk to negligible levels. Additionally, the domestic requirements would mitigate such risk while leaving substantially unchanged our current country-specific requirements regarding the importation of steers and spayed heifers into the United States. Steers and spayed heifers currently account for the majority of live cattle and bison imported into the United States.

The provisions of this proposed rule are based on the findings of this risk evaluation. The proposed rule would remove most of the brucellosis- and bovine tuberculosis-specific requirements for the importation of cattle and bison from the regulations. In their place, the proposed rule would establish a system, modeled on the domestic requirements, that would classify a region[6] of the world based

[4] See footnote 1.

[5] The bovine tuberculosis Uniform Methods and Rules are located here: *https://www.aphis.usda.gov/animal_health/animal_diseases/tuberculosis/downloads/tb-umr.pdf.* The brucellosis Uniform Methods and Rules are located here: *https://www.aphis.usda.gov/animal_health/animal_diseases/brucellosis/downloads/umr_bovine_bruc.pdf.*

[6] A region is defined in § 93.400 as ''any defined geographic land area identifiable by geological, political, or surveyed boundaries. A region may consist of any of the following: (1) A national entity (country); (2) a part of a national entity (zone, county, department, municipality, parish, Province, State, etc.); (3) parts of several national entities combined into an area; or (4) a group of national entities (countries) combined into a single area.''

both on its brucellosis or bovine tuberculosis prevalence and on whether it has a program for brucellosis or bovine tuberculosis that meets certain standards. The classifications would be as follows: Level I through V for bovine tuberculosis, and Level I through III for brucellosis. The regulations would allow regions to request evaluation for a particular classification, would establish a process by which APHIS would evaluate such requests, and would allow APHIS to lower a region's classification based on emerging evidence. Finally, the proposed rule would establish conditions for the importation of cattle and bison that correspond to the bovine tuberculosis or brucellosis classification of the region from which the cattle or bison will be exported.

III. Costs and Benefits

Economic effects of the proposed rule are not expected to be significant. Bovine tuberculosis affects less than 0.001 percent of domestic program herds, and brucellosis also less than 0.001 percent. There would be few on-the-ground operational changes for States or producers. Most reporting requirements in areas where bovine tuberculosis and brucellosis are not found, as well as surveillance, movement limitations, testing, and reporting in areas where either disease is present, would continue with little alteration.

Certain additional costs incurred by States, Tribes, and producers as a result of this proposed rule are expected to total between $3.0 million and $8.5 million. States and Tribes would incur costs in developing the proposed animal health plans for bovine tuberculosis and brucellosis, which would build significantly on existing operations with respect to these diseases. We anticipate that all 50 States and at least 3 Tribes would develop animal health plans. We estimate that the aggregate one-time cost of developing all of these animal health plans would be between about $750,000 and $2.9 million.

States and Tribes would also be required to report on the results of epidemiological investigations. We expect that the total annual cost for all States and Tribes of this reporting would be between $119,000 and $142,000.

We expect that, under current circumstances, four or five States are likely to develop recognized management area plans as proposed in this rule as part of their animal health plans. We estimate that the aggregate one-time cost of developing these four or five plans would be between $56,000 and $274,000.

The proposed rule would impose new interstate movement restrictions on rodeo, event, and exhibited cattle and bison, as well as additional costs of testing for producers of such cattle and bison. Costs of tuberculosis and brucellosis testing, about $10 to $15 per test, are small when compared to the value of the cattle tested or to production costs.

Given the volume of interstate movement of rodeo, event, and exhibited cattle and bison, the proposed testing requirements could cost owners of these cattle and bison, in aggregate, between about $2.0 million and $4.8 million annually.

Because the testing requirements in this rule are for interstate movement, the annual impact for an individual would depend on the number of animals moved interstate in a given year. It should be noted that there is overlap between APHIS' proposed testing requirements and current State and event requirements for testing of rodeo, event, and exhibition cattle and bison, which would reduce the net impact. A number of States, particularly those on major event circuits, already require tuberculosis and brucellosis testing before cattle can enter the State. There is not, however, consistency across States as to the timing of the testing relative to entry. Additionally, a number of these States have indicated to APHIS that they adopted the requirements because of the lack of Federal requirements. If this proposed rule is finalized and they rescind those requirements, this rule could eliminate that inconsistency. We request public comment from States with such requirements regarding whether they would, in fact, rescind them based on our proposed requirements.

This rule will also impose testing requirements for brucellosis for captive cervids moved interstate for any purpose other than immediate slaughter. We do not currently have information regarding the number of captive cervids moved interstate. However, based on the number of deer farms within the United States, industry estimates that between 5 and 10 percent of captive cervids within the United States are moved interstate annually, and brucellosis testing costs, we estimate the total annual testing costs would range between about $124,000 and $382,000.

The proposed rule would also establish a new system for classifying foreign regions regarding bovine tuberculosis and brucellosis and establishing the conditions under which cattle and bison could be imported into the United States. All foreign regions that currently export cattle to the United States would be evaluated under this new process before the conditions are put into effect. Conditions could change for a particular region following evaluation under this new system.

That being said, based on our knowledge of the current brucellosis and bovine tuberculosis programs and prevalence rates of our trading partners, we do not expect requirements for the importation of cattle and bison from foreign regions to change significantly as a direct result of this proposed rule. There are two specific exceptions to this, however. These exceptions would involve additional testing for breeding cattle from Mexico intended for export to the United States. Because most bovine exporting regions in Mexico do not currently have established brucellosis programs, they would automatically be classified in the lowest brucellosis category in this proposal and an additional whole herd brucellosis test would be required for imports of sexually mature and sexually intact cattle, *i.e.,* breeding cattle, from those regions. In addition, exporting regions currently considered Accreditation Preparatory (AP) for tuberculosis would likely be classified as Level IV under this proposal and an additional whole herd tuberculosis test would be required for imports of breeding cattle from those regions.

The impact of these additional test requirements is expected to be very limited. A very small number of breeding cattle are imported from Mexico. From 2010 through 2014, 26 breeding cattle were imported from Mexico on average annually. An even smaller number come from regions of Mexico that would be subject to additional whole herd tuberculosis testing requirements as well as the additional whole herd brucellosis testing. In 2014, only six breeding cattle were imported from such regions of Mexico. The cost of the additional testing would be dependent on the size of the herd from which bovines destined for export originate and the cost of administering a brucellosis and/or a tuberculosis test within that region of Mexico. The additional cost would represent a small portion of the value of the imported bovines. Assuming the costs of brucellosis and tuberculosis testing in the United States and in Mexico are similar, the combined additional testing would be equivalent to between 1.2 and 1.9 percent of the average per head value ($1,560) of imported Mexican breeding bovines, 2009–2014.

As discussed immediately above, we expect that the economic effects of this rule on foreign producers of cattle and bison would be minimal. With regard to domestic production, we expect that the benefits would justify the costs. While direct effects of this proposed rule for producers should be small, whether the entity affected is small or large, consolidation of the brucellosis and bovine tuberculosis regulations would benefit the affected livestock industries. The use of animal health plans would require States to identify and monitor potential sources of disease transmission in their State, leading to more focused, flexible and responsive disease management and reducing the number of producers that incur costs when disease concerns arise in an area.

The Role of the Program Standards Document

In several instances, the proposed rule provides general standards for activities conducted by a State or Tribe with an animal health plan that has been approved by APHIS, such as surveillance, epidemiological investigations, and affected herd management. In these instances, the proposed regulations do not specify in detail the procedures that would meet these standards in different situations.

To that end, APHIS is also making a Program Standards document available for review and comment along with the proposed rule.[7] The Program Standards document is a guidance document to help States and Tribes meet the standards of the proposed regulations. The Program Standards document does this by providing States and Tribes with an APHIS-approved method for conducting certain activities. These APHIS-approved methods would not be requirements, and States and Tribes could submit alternate procedures that they believe to meet the performance standards in the regulations to APHIS for evaluation and approval. However, if a State or Tribe follows the methods in the Program Standards document, they would be assured of complying with the regulations.

The Program Standards document also provides guidance regarding the types of information a State or Tribe should include in its animal health plan, templates for the various reports that we would require, flowcharts regarding the processes by which APHIS would evaluate animal health plans and redesignate States or Tribes to lower classifications for brucellosis or bovine tuberculosis, and other information.

We encourage individuals to read the proposed rule in conjunction with the Program Standards document. We also seek specific comment regarding ways in which the Program Standards document could be amended to make it more useful for potentially regulated entities.

Proposed Part 76

Definitions (§ 76.0)

Section 76.0 would contain definitions of the following terms: *Accredited herd for bovine tuberculosis, accredited herd for brucellosis, accredited veterinarian, Administrator, affected herd management plan, animal identification number (AIN), annual report form, APHIS, APHIS representative, bison, bovine tuberculosis, brucellosis, calf raiser, captive cervid, depopulate, epidemiologist designated by the District Director, exposed, feedlot, herd, herd test, immediate slaughter, interstate certificate of veterinary inspection (ICVI), livestock, location-based numbering system, location identification (LID) number, management area, National Uniform Eartagging System (NUES), official Brucella vaccine, official brucellosis vaccination program, official eartag, official eartag shield, official identification number, officially identified, official seal, official test, official tester, official testing laboratory, owner, permit for movement of restricted animals, premises identification number (PIN), program animals, Program Standards document, qualified accredited veterinarian, quarantine feedlot, quarantine pen, reactor, recognized slaughtering establishment, reporting period, responsible person, spayed heifers, specifically approved stockyard, State, State or Tribal animal health official, State or Tribal representative, steers, suspect, test-eligible animal, Tribe,* and *United States.*

If a definition of one of these terms exists in the AHPA, we would define the term as it is defined in the AHPA. Thus, we would define *livestock, State,* and *United States* as these terms are defined in the AHPA.

Similarly, the AHPA provides that *Indian tribe* has the same meaning within the Act that it has in section 450b of title 25 of the U.S. Code. That title, also referred to as the Indian Self-Determination and Education Assistance Act, defines Indian tribe as ''any Indian tribe, band, nation, or other organized group or community, including any Alaska Native village or regional or village corporation as defined in or established pursuant to the Alaska Native Claims Settlement Act (85 Stat. 688) [43 U.S.C. 1601 *et seq.*], which is recognized as eligible for the special programs and services provided by the United States to Indians because of their status as Indians.''

If a term in proposed part 76 is not defined in the AHPA, our next reference points would be the existing definitions in 9 CFR parts 77 and 78. To that end, several terms would have the same meaning as they currently do within parts 77 and 78. We would define *Administrator, animal identification number (AIN), APHIS representative, location-based numbering system, National Uniform Eartagging System (NUES), official eartag, official eartag shield, official identification number,* and *recognized slaughtering establishment* as these terms are currently defined in both part 77 and part 78.

Similarly, *accredited veterinarian* is defined in a substantially similar manner in parts 77 and 78, but with minor differences in syntax and scope. However, the definition in part 78 is more common within 9 CFR. Hence, we would define *accredited veterinarian* as it is defined in that part.

The term *captive cervid* is currently defined in part 77, but not part 78. This is because captive cervids are currently regulated under the bovine tuberculosis program, but not under the brucellosis program. We would therefore define the term *captive cervid* as it is currently defined in part 77.

We would define the remaining terms in the following manner.

We would define an *accredited herd for bovine tuberculosis* as a herd that, in accordance with APHIS' standards for accreditation, has tested negative for bovine tuberculosis using an official test and is subject to measures that lower the risk of bovine tuberculosis introduction into the herd through the addition of animals to the herd. Similarly, we would define an *accredited herd for brucellosis* as a herd that, in accordance with APHIS' standards for accreditation, has tested negative for brucellosis using an official test and is subject to measures that lower the risk of brucellosis introduction into the herd through the addition of animals to the herd. These definitions would further provide that APHIS' standards for accreditation are described in the Program Standards document.

The standards for accreditation for bovine tuberculosis and brucellosis in the Program Standards document would be substantively similar to the current

[7] The Program Standards document is available at the Web address listed in this document beneath the heading **ADDRESSES** and at the following address: *http://www.aphis.usda.gov/animal_health/animal_dis_spec/cattle.*

standards for accreditation of herds within the bovine tuberculosis program, which are found in the document ''Bovine Tuberculosis Eradication, Uniform Methods and Rules, Effective January 1, 2005'' [8] and the current standards for certification of herds as free of brucellosis, which are found in part 78. However, certain aspects of the existing standards, such as the minimum age of animals that must be tested and the intervals between testing for reaccreditation, are linked to the current prevalence-based State classification system, which would be obsolete under the provisions of this proposed rule. Moreover, the existing standards do not reflect certain practices, such as testing of certain non-natural additions to a herd, that we have long required operationally in order for us to reach a determination that animals in the herd are free of brucellosis or bovine tuberculosis, and which would be included in the standards in the Program Standards document. Thus, there would be several differences between the current standards for herd accreditation or certification and the standards within the Program Standards document.

We wish to solicit specific public comment regarding one of these differences. Currently, if a State has a zone for bovine tuberculosis or an area covered by a brucellosis management plan, in other words, an area in which a source of bovine tuberculosis or brucellosis is known to exist, we allow herds in the area to be accredited for bovine tuberculosis or certified free of brucellosis.

However, we have discovered bovine tuberculosis or brucellosis in several accredited herds in such areas, sometimes no more than a few months after the date of reaccreditation. In each case, there was evidence that the herds probably became affected through contact with infected wildlife.

Our standards for accreditation, both our current standards and those proposed, are based on an evaluation of mitigation measures an owner has put in place to address the risk of bovine tuberculosis or brucellosis introduction into his or her herd through the addition of animals to the herd. Our standards do not evaluate the risk posed to a herd by wildlife reservoirs of bovine tuberculosis or brucellosis. We note, moreover, that it is significantly more difficult to mitigate the risk of disease transmission that is posed by wildlife reservoirs than it is to mitigate the risk of disease transmission that is posed by adding animals to a herd. In short, while we have confidence that accredited or certified herds that do not reside in areas with known disease reservoirs present a low risk of becoming affected with bovine tuberculosis or brucellosis, we do not have the same degree of confidence regarding herds in areas with known reservoirs of disease.

For this reason, our proposed standards would not allow herds in areas with known reservoirs of disease, which we would term management areas (see below), to be accredited for bovine tuberculosis or brucellosis. We also would not allow owners of currently accredited herds in such areas to seek reaccreditation if this rule is finalized. We request comment from these owners and all interested parties regarding the likely impacts to their operations, if any, that this change in policy would bring about.

Apart from herds in recognized management areas, herds that are accredited for bovine tuberculosis would continue to be considered accredited herds if this proposed rule is finalized, and herds that are certified brucellosis-free herds would be considered accredited herds for brucellosis. Owners of these herds would not be held to the differing standards of the Program Standards document until the time that the herds would have to be tested for reaccreditation. Moreover, as the definitions of *accredited herd for bovine tuberculosis* and *accredited herd for brucellosis* would provide, States could submit an alternate accreditation standard to the Administrator for evaluation and approval at any point by sending a written request to APHIS, provided that the standard is at least equally stringent to that within the Program Standards document.

We would define *annual report form* as the annual report form authorized by the Administrator for State and Tribal use to fulfill the requirements of proposed part 76. The report form, which would consolidate and streamline existing annual report forms for the brucellosis and bovine tuberculosis programs, would be located on the APHIS Web site. A draft template for the annual report form is located in the Program Standards document.

On a related matter, we would define the *reporting period* covered by the annual report as October 1 of one year through September 30 of the following year. This is the current reporting period for annual reports within the bovine tuberculosis program. (We recognize that the reporting period for annual reports within the brucellosis program is currently staggered, and corresponds to the date on which a State was assigned its current status. If this rule is finalized, we would collaborate with States to transition them over to this new, uniform reporting period.)

We would define *APHIS* as the Animal and Plant Health Inspection Service of the United States Department of Agriculture.

We would define *bison* as domestically produced or captive bison. As provided in the definition of *program animals* (see below), bison would be considered one of the species covered by part 76. However, wild bison are not considered livestock within our proposed regulations, and our definition of *bison* would reflect this. We would also include this definition so that, for the sake of brevity, we may refer to the species covered by the regulations as bison, rather than domestically produced or captive bison, throughout part 76.

We would define *bovine tuberculosis* as the contagious, infectious, and communicable disease caused by *Mycobacterium bovis,* which is also referred to as tuberculosis.

Currently, part 77 refers to the disease as tuberculosis, and provides, in the definition of *tuberculosis,* that the disease is also referred to as bovine tuberculosis. However, in recent years, we have referred to the disease as bovine tuberculosis in order to provide clarity regarding the causal agent regulated by the bovine tuberculosis program and to differentiate between this agent and *Mycobacterium tuberculosis,* the most common cause of tuberculosis in humans.

We would define *brucellosis* as the contagious, infectious, and communicable disease caused by *Brucella abortus,* and would specify that it is also known as Bangs disease, undulant fever, and contagious abortion. Currently, in the definition of *brucellosis* in part 78, we consider all bacteria within the genus *Brucella* to be causal agents for brucellosis. However, this is primarily because another species of *Brucella, Brucella suis,* which is the most common cause of brucellosis in swine, is also regulated in part 78. *Brucella abortus* is the most common cause of brucellosis in cattle, bison, and captive cervids, the species that would be regulated under the consolidated brucellosis and bovine tuberculosis program. Hence, as we stated in the draft regulatory framework document, *Brucella abortus* would be the disease agent regulated under proposed part 76.

(We would continue to regulate *Brucella suis* in swine under part 78 and would continue to investigate

[8] To view the Uniform Methods and Rules, go to *http://www.aphis.usda.gov/animal_health/animal_diseases/tuberculosis/downloads/tb-umr.pdf.*

occurrences of *Brucella suis* infection in ruminants as part of our national program for swine brucellosis. In addition, based on comments received on the draft regulatory framework document, we request specific public comment on whether to initiate rulemaking to establish a certification program for *Brucella melitensis* in goats.)

We would define *calf raiser* as a cattle production operation in which calves, yearlings, and other sexually immature cattle are brought together and maintained until they are of sufficient size or sexual maturity to move to their next stage of production. As we mentioned previously in this document, because cattle from disparate premises of origin are often brought together for feeding purposes at such operations, the provisions of part 76 that pertain to epidemiological investigations, which would be contained in proposed § 76.7, would specify a different protocol for epidemiological investigations arising because an infected animal is discovered at a calf raiser than for epidemiological investigations arising at other premises where such commingling does not occur or is far less frequent.

We would define *program animals,* that is, the species covered by proposed part 76, as cattle, bison, and captive cervids.

We would define *depopulate* as to destroy program animals in a herd at a location, in a manner, and within a timeframe as specified within an affected herd management plan. We would define an *affected herd management plan* as an affected herd management plan designed by the herd owner, the owner's veterinarian if so requested, and a State, Tribal, or APHIS representative to control and eradicate bovine tuberculosis and/or brucellosis within the herd. The definition of *affected herd management plan* would further specify that an affected herd management plan must be approved by a State or Tribal animal health official and the Administrator.

The current definition of *depopulate* within part 77, ''to destroy all livestock in a herd by slaughter or by death otherwise,'' does not contain a reference to affected herd management plans. However, as a matter of Agency policy, we have generally required affected herd management plans to be put in place prior to depopulation of any brucellosis- or bovine tuberculosis-affected herd. Among other benefits, such plans help ensure that brucellosis- or bovine tuberculosis-affected herds are depopulated in a sanitary manner and owners of depopulated herds put measures in place to prevent the future introduction of brucellosis or bovine tuberculosis into herds at their premises.

The definition in part 77 also specifies that all animals within a herd must be destroyed in order for the herd to be considered depopulated. However, within the brucellosis program, there have been several instances in recent years in which we have considered a herd to be depopulated although certain animals within the herd were removed from the herd for diagnostic purposes, and not destroyed. In such instances, the affected herd management plan established for the affected herd provided the specific conditions under which these animals would be moved in order to ensure that they presented no risk of spreading brucellosis to other animals. Moreover, although the bovine tuberculosis program does not currently allow for such a practice, we can envision instances in which it might prove beneficial in order for us to determine the actual prevalence of the disease within an affected herd. Accordingly, we would not specify that all animals within a herd must be destroyed in order for the herd to be considered depopulated.

On a related matter, part 50, which provides conditions under which the Administrator may pay indemnity for animals destroyed because of bovine tuberculosis, effectively precludes indemnity from being offered if animals are removed from an affected herd prior to depopulation of the herd. Therefore, we are proposing to remove paragraph (f) of § 50.14, which contains this prohibition.

We would define *epidemiologist designated by the District Director* as an epidemiologist selected by the APHIS District Director, in consultation with State or Tribal animal health officials, to perform the function required. This definition is modeled on the definition of *designated epidemiologist* currently found in part 78, but also reflects a recent reorganization of APHIS' Veterinary Services program that changed the manner in which this position is designated.

We would define *exposed* as an animal that has had association with infected program animals, livestock, or other sources of brucellosis or bovine tuberculosis such that an epidemiologist designated by the District Director determines the animal may be infected.

We would define *feedlot* as a facility for assembling and feeding program animals.

We would define *quarantine pen* as an area within a feedlot that is approved by APHIS as having sufficient biosecurity measures in place to assemble and feed exposed program animals, without risk of spread of brucellosis or bovine tuberculosis to other susceptible animals at the facility. Similarly, we would define *quarantine feedlot* as a facility that is approved by APHIS as having sufficient biosecurity measures in place to assemble and feed exposed program animals, without risk of spread of brucellosis or bovine tuberculosis to other susceptible animals at the facility. The definitions of *quarantine pen* and *quarantine feedlot* would also both specify that program animals may only be moved interstate from such facilities if their movement is to a recognized slaughtering establishment, or another quarantine pen or quarantine feedlot.

We recognize that certain subsectors within the cattle industry refer to feedlots as feedyards. We request specific public comment regarding which nomenclature to use.

In proposed § 76.10, we would allow program animals classified as exposed to brucellosis or bovine tuberculosis to be moved interstate to quarantine pens and quarantine feedlots, among other approved locations.

We would define *herd* as all livestock under common ownership or supervision that are grouped on one or more parts of any single premises (lot, farm, or ranch) for at least 4 months; or all livestock under common ownership for at least 4 months on two or more premises which are geographically separated but on which animals from the different premises have been interchanged or had contact with each other. This definition would be modeled on the definition currently found in part 78, but would include a provision, currently found in part 77's definition, that livestock must be under common ownership or supervision for at least 4 months in order to be considered a herd. We consider this provision necessary in order to differentiate herds from animals maintained at a calf raiser's premises or at a feedlot for a short period of time.

Herd test would have different meanings for brucellosis and bovine tuberculosis. For brucellosis, it would mean the following:

- In any area of a consistent State other than a recognized management area, testing of all sexually intact animals within a herd that are 18 months of age or older, as well as all sexually intact animals in the herd that are less than 18 months of age and were not born into the herd, except those sexually intact animals that are less than 18 months of age and originate directly from a currently accredited herd for brucellosis.

• In any area of a provisionally consistent State other than a recognized management area, testing of all sexually intact animals within a herd that are 12 months of age or older, as well as all sexually intact animals in the herd that are less than 12 months of age and were not born into the herd, except those sexually intact animals that are less than 12 months of age and originate directly from a currently accredited herd for brucellosis.

• In any area of an inconsistent State, or in a recognized management area for brucellosis, testing of all sexually intact animals within a herd that are 6 months of age or older, as well as all sexually intact animals in the herd that are less than 6 months of age and were not born into the herd, except those sexually intact animals that are less than 6 months of age and originate directly from a currently accredited herd for brucellosis.

For bovine tuberculosis, *herd test* would mean the following:

• In any area of a consistent State other than a recognized management area, testing of all animals within a herd that are 18 months of age or older, as well as all animals in the herd that are less than 18 months of age and were not born into the herd, except those animals that are less than 18 months of age and originate directly from a currently accredited herd for bovine tuberculosis.

• In any area of a provisionally consistent State other than a recognized management area, testing of all animals within a herd that are 12 months of age or older, as well as all animals in the herd that are less than 12 months of age and were not born into the herd, except those animals that are less than 12 months of age and originate directly from a currently accredited herd for bovine tuberculosis.

• In any area of an inconsistent State and in a recognized management area for bovine tuberculosis, testing of all animals within a herd that are 6 months of age or older, as well as all animals in the herd that are less than 6 months of age and were not born into the herd, except those animals that are less than 6 months of age and originate directly from a currently accredited herd for bovine tuberculosis.

We would exempt sexually neutered animals from herd tests for brucellosis because there is no scientific evidence suggesting they can transmit brucellosis.

The minimum testing ages specified within this definition correlate to the degree of risk of exposure to brucellosis or bovine tuberculosis that we would associate with the area in which the herd resides. We encourage all interested persons to review this definition within the context of subsequent discussions in this proposed rule regarding our proposed State and Tribal classification system (see ''*State or Tribal classifications (§ 76.3)''* below) and recognized management areas (see ''*Recognized management areas (§ 76.5)''* below).

We would define *immediate slaughter* as consignment directly to a recognized slaughtering establishment. In proposed §§ 76.14 and 76.15, we would allow cattle and bison to be moved interstate without testing for brucellosis or bovine tuberculosis from States and Tribes with the lowest status for these diseases, inconsistent, provided that the animals are destined for immediate slaughter.

We would define *interstate certificate of veterinary inspection (ICVI)* in a manner that is similar to the definition currently found in parts 77 and 78. However, whereas the current definition specifies that a document other than an ICVI may be used in order to provide an alternative to typing or writing individual animal identification on an ICVI, but still requires an ICVI to accompany this document, we would allow a document to take the place of an ICVI altogether, provided that the following conditions are met:

• The document is agreed upon by the shipping and receiving States or Tribes as an acceptable alternative to an ICVI;

• The document is a State or Tribal form or APHIS form that requires individual identification of animals;

• Each copy of the document identifies each animal to be moved, but any information pertaining to other animals, and any unused space on the document for recording animal identification, is crossed out in ink;

• The following information is written in ink in the identification column on the original and each copy and is circled or boxed, also in ink, so that no additional information can be added: The name of the document and either the unique serial number on the document or, if the document is not imprinted with a serial number, both the name of the person who prepared the document and the date the document was signed; and

• A copy of the document accompanies the program animals during interstate movement.

During the comment period for the rule that proposed to establish animal identification requirements for livestock moving interstate (76 FR 50082–50110, Docket No. APHIS–2009–0091), several commenters urged us to consider whether ''event passports'' and other similar documents could be used in lieu of ICVIs for animals, such as rodeo steers, that move frequently in interstate commerce. The rule that finalized that proposal specified, in its preamble, that such documents could be used in lieu of ICVIs. Our proposed definition would also allow such documents to be used.

We would define *location identification (LID) number* and *premises identification number (PIN)* as these terms are currently defined in parts 77 and 78, with the following modification: We would remove references to group identification of livestock from the definitions. We would do this because proposed part 76 would not allow for group identification of program animals.

We would define *management area* as a clearly delineated geographical area in which a State or Tribe has detected brucellosis or bovine tuberculosis, has determined that there is a risk of transmission of brucellosis or bovine tuberculosis to program animals, and has taken or proposes to take measures to control the spread of the brucellosis or bovine tuberculosis within and from the area and/or to eradicate the disease within the area. We discuss management areas at length below, in our discussion of proposed § 76.5.

We would define *official brucellosis vaccination program* as a brucellosis vaccination program that consists of, at a minimum:

• Vaccination of program animals with an official *Brucella* vaccine, which we would define as a vaccine for brucellosis that has been approved by the Administrator and produced under license of USDA;

• Tattooing to specify the animals' vaccination status; and

• Identification of the animals with an official eartag designed to specify the animals' vaccination status.

We would define *officially identified:*

• For cattle and bison, as identified by means of an official eartag.

• For captive cervids, as identified by an official eartag, by a tattoo containing an official identification number, or by other identification devices acceptable to APHIS and the shipping and receiving States or Tribes.

With regard to cattle and bison, we recognize that parts 77 and 78 currently allow other identification devices to be used as official identification. However, the regulations in those parts were issued during a time when there were not minimal national standards within 9 CFR for identification of cattle and bison that move in interstate commerce. Thus, the official identification requirements in parts 77 and 78 had to function as those standards for the cattle and bison industries within the United States. Accordingly, because the

requirements had to be broadly applicable, we allowed them to incorporate a degree of flexibility regarding the types of identification we would authorize as official identification.

However, 9 CFR now contains minimal national standards for identification of cattle and bison that move in interstate commerce, in part 86; these were added in 2013 (78 FR 2040–2075; Docket No. APHIS–2009–0091). We believe that the identification requirements in that part are sufficient for most cattle and bison that are moved in interstate commerce; hence, we would not include official identification requirements for those animals in part 76, and would instead instruct persons to consult part 86 for the relevant identification requirements. We would only specify identification requirements in part 76 for classes of animals that we believe present a higher-than-average risk of transmitting brucellosis or bovine tuberculosis to other animals. We believe that it is important to be able to effectively trace the movement of such animals in interstate commerce. Because official eartags contain unique identifiers and are tamper-evident, we consider them to provide the most reliable means of achieving this degree of traceability.

While 9 CFR part 86 contains minimal national standards for identification of cattle and bison that move in interstate commerce, it currently defers to part 77, which we are proposing to remove from the regulations, for official identification requirements for captive cervids. Part 77 currently allows captive cervids to be officially identified by means of an official eartag, a brand, or a tattoo providing unique identification of the cervid.

However, we are not aware of any captive cervid producers who brand their cervids for purposes of official identification. Moreover, we are aware of a number of identification devices, such as subcutaneous RFID transponders, that could be used for unique identification of captive cervids. Thus, our proposed definition of *officially identified* for captive cervids would not refer to brands, but would allow for such alternate devices when agreed upon by APHIS and the shipping and receiving States or Tribes to constitute such official identification.

We would define *official seal* as a serially numbered, metal or plastic strip, consisting of a self-locking device on one end and a slot on the other end, which forms a loop when the ends are engaged and which cannot be reused if opened, or a serially numbered, self-locking button. Current definitions of *official seal* within 9 CFR do not specify that a strip used for an official seal may be plastic, and do not allow a serially numbered, self-locking button to be used in lieu of such a strip. However, we have long used both plastic strips and self-locking buttons to seal means of conveyance containing infected, reactor, suspect, or exposed animals, and have found such seals to be as reliable as metal strips.

We would define *official test* as any test that is approved by the Administrator for determining the presence or absence of brucellosis or bovine tuberculosis in program animals that is conducted and reported by an official tester. If an official test is applied to a program animal, it would have to be identified by means of an official eartag. If this eartag uses the National Uniform Eartagging System, one of the official identification systems that has been approved by APHIS, the eartag would have to indicate the State or Tribe in which it was applied; if it uses the Animal Identification Number system, another approved official identification system, it would have to indicate the premises on which it was applied. Finally, if an animal that is tested already has such an eartag, the information on this eartag would have to recorded by the tester. These provisions regarding unique identification of tested animals would codify long-standing Agency policies that we consider necessary to maintain accurate records regarding the application of official tests for program purposes.

We would define *official tester* as any person associated with the conducting and reporting of official tests within an official testing laboratory, or any person authorized by the Administrator to conduct and report official tests outside of a laboratory environment. Proposed § 76.17 would contain the conditions under which the Administrator may authorize a person to conduct and report official tests outside of a laboratory environment.

We would define *official testing laboratory* as a laboratory approved by the Administrator in accordance with part 76 to conduct official tests. Proposed § 76.17 would contain this laboratory approval process.

We would define *owner* as any person who has legal or rightful title to program animals whether or not they are subject to a mortgage. This definition would mirror the definition of *owner* currently provided in parts 50, 51, and 79 of 9 CFR.

We would define *permit for movement of restricted animals* as a document that is issued by an APHIS representative, State or Tribal representative, or accredited veterinarian and that authorizes the restricted interstate movement of livestock to certain specified destinations. In proposed § 76.10, we would require this document, which is currently VS Form 1–27, to accompany reactor, suspect, and exposed program animals that are moved interstate.

We would define *Program Standards document* as a document providing guidance related to the regulations contained in part 76. Substantive changes to Program Standards document would be announced through notices published in the **Federal Register**. These notices would request public comment on the changes.

We would define *qualified accredited veterinarian* as that term is defined in 9 CFR part 160.

We would define *reactor* as:

- For brucellosis, a program animal that has had non-negative test results to an official test such that an epidemiologist designated by the District Director has determined that there is a high likelihood that the animal is infected with brucellosis, and a low likelihood of false positive test results.
- For bovine tuberculosis, a program animal that has had non-negative test results to an official test such that an epidemiologist designated by the District Director has determined that further action is warranted to make a final determination regarding the animal's disease status.

We believe these differing definitions for *reactor* to be warranted because, while reactors for bovine tuberculosis have usually tested non-negative to both an official screening test and secondary (corroboratory) test and must be taken to necropsy or slaughter for a final determination of disease status, reactors for brucellosis often are classified based on test results to a screening test that fell within parameters that strongly suggested the presence of brucellosis in the animal.

We would define *responsible person* as the individual who is immediately responsible for implementation and maintenance of an animal health plan within a State or Tribe, who is authorized to amend the plan as circumstances warrant, and who will assume responsibility for the State or Tribe's compliance with all provisions of the plan and all requirements in part 76.

We would define *spayed heifers* as sexually neutered female cattle or bison, and would define *steers* as sexually neutered male cattle or bison.

We would define *specifically approved stockyard* as premises where program animals are assembled for sale purposes and which meet the standards set forth in § 71.20 and are approved by APHIS. This definition is substantively similar to the definition currently found in part 78, but would add a clarification, currently absent in that definition, that all specifically approved stockyards must be approved by APHIS. Proposed § 76.10 would allow reactor, suspect, and exposed program animals to be moved interstate to specifically approved stockyards, among other approved locations.

We would define *State or Tribal animal health official* as the State or Tribal official responsible for livestock and poultry disease control and eradication programs in a State or Tribe, and would define *State or Tribal representative* as an individual employed in animal health work by a State or Tribe, or a political division of a State or Tribe, and authorized by that State or Tribe to perform the function involved. These definitions would be modeled on the definitions of *State animal health official* and *State representative* that are currently found in multiple parts within 9 CFR, but would reflect the fact that we would now authorize a Tribe to submit an animal health plan and request a brucellosis or bovine tuberculosis classification apart from the State in which the Tribal lands are located.

We would define *suspect* as a program animal that has had non-negative test results to an official test for brucellosis or bovine tuberculosis that lead an epidemiologist designated by the District Director to determine that the animal should not be classified as a reactor, but cannot be classified as free of brucellosis or bovine tuberculosis.

Unless the Administrator specifies or approves an alternate testing age, *test-eligible animal* would mean:

- For brucellosis, all sexually intact program animals in a herd that are 6 months of age or older, and all program animals in the herd that are less than 6 months of age and were not born into the herd, except those program animals that are less than 6 months of age and originate directly from an accredited herd for brucellosis.
- For bovine tuberculosis, all program animals in a herd that are 12 months of age or older, and all program animals in the herd that are less than 12 months of age and were not born into the herd, except those program animals that are less than 12 months of age and originate directly from an accredited herd for bovine tuberculosis; except that, if the herd is located on a calf raiser's premises, all program animals in the herd that are 2 months of age or older are considered test-eligible for bovine tuberculosis.

We consider a definition of *test-eligible animal* to be necessary because, in proposed § 76.7, each protocol for an epidemiological investigation would require States and Tribes to determine the disease status of test-eligible animals in certain herds.

We recognize that currently, in § 78.1, sexually intact cattle and bison are not considered test-eligible for brucellosis until they are at least 18 months of age. However, in part 78, the term test-eligible is applied in a generic sense to animals that are sexually mature and sexually intact. We agree that, in the absence of a known disease risk, 18 months of age is an appropriate threshold for test-eligibility for brucellosis within the United States.

However, in proposed part 76, we would reserve the term *test-eligible* for animals in herds that may have harbored or come in contact with a brucellosis- or bovine tuberculosis-infected animal, and that therefore could potentially be affected with brucellosis and bovine tuberculosis. In such instances, there is a known disease risk, the infected animal, and it would be prudent to determine the disease status of all animals in the herd that could potentially be infected with brucellosis or bovine tuberculosis because of that disease risk. Because animals as young as 6 months of age may transmit brucellosis, we would consider them test-eligible for the purposes of proposed part 76.

Authority of the Administrator (§ 76.1)

Proposed § 76.1 would state that, notwithstanding the provisions of part 76, the Administrator is authorized pursuant to the AHPA to prohibit or restrict the movement in commerce of any animals, if the Administrator considers that prohibition or restriction to be necessary to prevent the dissemination of brucellosis or bovine tuberculosis within the United States. It would further state that, pursuant to the Act, the Administrator may also hold, seize, quarantine, treat, destroy, dispose of, or take other remedial action with respect to any animal, article, or means of conveyance that is moving or has moved in interstate commerce, if the Administrator has reason to believe that animal, article, or means of conveyance may carry, have carried, or have been affected with or exposed to brucellosis or bovine tuberculosis at the time of interstate movement.

While this section would be a restatement of our authority under the AHPA, we consider it necessary to include it within proposed part 76. This is because the regulations in part 76 would be predicated on the low prevalence for brucellosis and bovine tuberculosis within the United States, and would provide adequate mitigations for the majority of instances in which cattle, bison, and captive cervids are moved interstate. There may, however, be certain unlikely scenarios, such as a significant outbreak of brucellosis or bovine tuberculosis within a State or Tribe, which the regulations in part 76 would not be adequate to address.

If such a scenario were to occur, the Administrator would take such action as he or she deems appropriate to address the risk that cattle, bison, or captive cervids moved interstate from the State or Tribe may present of disseminating brucellosis or bovine tuberculosis. This could include issuing an order placing additional restrictions on the interstate movement of cattle, bison, or captive cervids from the State or Tribe, or issuing an order prohibiting the movement of cattle, bison, or captive cervids from that State or Tribe until the outbreak is addressed.

Animal Health Plan Requirements (§ 76.2)

The State and Tribal classification system for brucellosis and bovine tuberculosis within proposed part 76 would be based on whether a State or Tribe has drafted an animal health plan to address the diseases, whether APHIS has approved this plan, and whether the State or Tribe has implemented and is performing the activities and enforcing the measures specified in the plan. (We consider activities to be all actions that a State or Tribe specifies in its animal health plan that are not mitigation measures. We consider measures to be those mitigations specified within the plan.) Proposed § 76.2 would describe the process for States or Tribes to submit an animal health plan, the categories of information that must be contained in any animal health plan, the review process for animal health plans, the notice-based process by which we would make the plans publicly available for review and comment, our follow-up actions on any such notice, the process for requesting amendments to an animal health plan, and providing for compliance reviews and audits following approval of an animal health plan.

Proposed paragraph (a) of § 76.2 would provide that, in order for a State or Tribe to be given the highest classification, consistent, or the intermediate classification, provisionally consistent, in our new

classification system, a State or Tribe would have to submit an animal health plan to APHIS via the mail as provided within the Program Standards document, or submit the plan electronically as specified within the Program Standards document. (Proposed § 76.3 describes the State and Tribal classification system at length.)

At a minimum, in order to be considered complete, each animal health plan would have to contain the following categories of information:

- Confirmation that the State or Tribe has a legal and regulatory basis for the activities and measures specified within the plan.
- A description of the organization and infrastructure of the animal health and wildlife authorities within the State or Tribe. The description would have to include the animal health and wildlife work force within the State or Tribe that is available to implement or perform activities and maintain and enforce measures specified within the animal health plan, and would have to demonstrate that the State or Tribe has sufficient resources to implement, maintain, and enforce its animal health plan.
- The name and contact information for the responsible person that the State or Tribe has designated to oversee implementation, performance, and enforcement of activities and measures carried out under the plan within the State or Tribe, and the name and contact information for the person that the State or Tribe has designated to oversee implementation, performance, and enforcement of wildlife activities and measures carried out under the plan. States or Tribes could designate a single individual to serve in multiple roles.
- A description of program animal demographics within the State or Tribal lands. This description would have to include the approximate number and types of program animal herds within the State or Tribal lands, the approximate number of animals in those herds, and the approximate number and geographic distribution of any animal concentration points within the State or Tribal lands. (The Program Standards document would provide examples of what would constitute an animal concentration point.)
- A description of the surveillance activities for brucellosis or bovine tuberculosis in animals within the State or Tribal lands that are being conducted or would be conducted under the animal health plan. (We would include a footnote, footnote 1, directing individuals to proposed § 76.6 for minimum requirements regarding surveillance activities conducted under an animal health plan.)
- A description of the known sources of brucellosis or bovine tuberculosis that pose a risk of disease introduction into program animals within the State or Tribal lands, and an assessment of the likelihood of transmission of brucellosis or bovine tuberculosis from these sources to program animals within the State or Tribal lands. This description would have to include each of the following:
  - The approximate number of herds or wildlife populations within the State or Tribal lands that are known sources of brucellosis or bovine tuberculosis, and the approximate number of animals in these herds or populations;
  - The approximate prevalence of brucellosis or bovine tuberculosis infection in those populations, the geographic distribution of the populations within the State or Tribal lands, and any other factors that make the populations a potential source of brucellosis or bovine tuberculosis transmission to program animals within the State or Tribal lands;
  - The potential for exposure of program animals within the State or Tribal lands to these known source populations;
  - Factors, other than mitigation measures that are or would be implemented by the State or Tribe, that may influence this potential for exposure (the Program Standards document would provide illustrative examples of such factors); and
  - An assessment of the likelihood of transmission of brucellosis or bovine tuberculosis from known source populations to program animals within the State or Tribal lands.
- If the State or Tribe has identified known source populations of brucellosis or bovine tuberculosis that pose a risk of disease introduction into program animals within the State or Tribal lands, a description of the measures that the State or Tribe has implemented or would implement to prevent and/or mitigate the risk that program animals within the State or Tribal lands will become infected with brucellosis or bovine tuberculosis.
- A description of the epidemiological investigation and affected herd management activities that the State or Tribe has taken or would take in response to occurrences of brucellosis and bovine tuberculosis within program animals in the State or Tribal lands. (We would include a footnote, footnote 2, directing individuals to proposed § 76.7 for minimum requirements regarding epidemiological investigation and affected herd management activities conducted under an animal health plan.)

We recognize that the draft template for an animal health plan in the Program Standards document contains two additional information categories, one pertaining to the bovine tuberculosis program certification offered to qualified accredited veterinarians within the State or Tribe, the other to State and Tribal oversight of the official tests administered by these veterinarians. The information a State or Tribe supplies within these categories would not be directly included in our evaluation of the animal health plan for purposes of determining whether or not to propose to approve it, but rather to aid in the implementation and maintenance of our national program certification for bovine tuberculosis. We discuss this program certification at greater length below, in our discussion under the heading ''*Official tests for brucellosis and bovine tuberculosis, official testing laboratories, and official testers (§ 76.17).*''

Proposed paragraph (b) of § 76.2 would state that APHIS will review the plan submitted by the State or Tribe for completeness. This initial review would ensure that the State or Tribe has provided information in each of categories listed above, or has provided an explanation regarding why the information category is not applicable to the State or Tribe.

Once we determine a plan to be complete, APHIS would conduct formal review and evaluation of the plan. First, we would determine whether the State or Tribe has identified sources of brucellosis or bovine tuberculosis within the State and Tribal lands. If the State or Tribe has stated that no sources of the disease are known to exist in the State or Tribal lands, we would expect the State or Tribe to provide a justification in support of this statement, including documentation of the surveillance or other activities that led to this conclusion. If we consider the statement to be justified, we would evaluate the epidemiological investigation and affected herd management activities that the State or Tribe states it would take in responses to occurrences of brucellosis or bovine tuberculosis within program animals in the State or on Tribal lands, whether the State or Tribe has legal and regulatory authority for these activities, and whether the State or Tribe has sufficient personnel to implement and, if necessary, effectively carry out these activities and enforce these measures.

If the State or Tribe does identify sources of brucellosis or bovine

tuberculosis in the State or Tribal lands, we would evaluate the likelihood of transmission of brucellosis or bovine tuberculosis from known source populations to program animals in light of the information provided by the State or Tribe regarding the prevalence of the diseases within the sources, potential for exposure of program animals to these sources, and factors that may influence this exposure. We would also evaluate the mitigation measures specified by the State or Tribe to determine whether they are adequate to prevent transmission of brucellosis or bovine tuberculosis from source populations to program animals, and would evaluate the surveillance activities specified by the State or Tribe to determine whether they would be sufficient to detect changes in prevalence levels of disease in the source population, or the presence of disease in program animals exposed to these source populations. Finally, we would evaluate whether the State or Tribe has adequate legal and regulatory authority and personnel to carry out the activities specified within the plan.

If this rule is finalized, it is possible that certain smaller States and Tribes would wish to coordinate brucellosis or bovine tuberculosis program activities or share personnel with neighboring States or Tribes. Guidance regarding how these consolidated efforts should be described in the State or Tribe's animal health plan is provided in the Program Standards document.

There could be instances when APHIS lacks technical expertise to evaluate certain provisions within a State or Tribe's animal health plan. For example, if a State or Tribe identifies free-ranging wildlife as a source population of brucellosis or bovine tuberculosis within the State or Tribal lands, but states that the movement patterns of the wildlife effectively preclude contact with program animals within the State or Tribal lands, that the risk of transmission of brucellosis or bovine tuberculosis from those wildlife populations to these program animals is correspondingly remote, and that mitigation activities to address this risk are therefore not necessary, it is possible that APHIS would not possess the knowledge of the movement patterns necessary to evaluate this claim. In such instances, APHIS would share a copy of the plan with Federal, State, Tribal, and/or industry experts for technical review and comment regarding the issue or issues for which we lack expertise.

Upon conclusion of review of the plan, we would make a determination regarding whether or not to propose to approve the plan. If we determine not to propose to approve the plan, we would contact the State or Tribe that submitted the plan and set forth the deficiencies identified in the plan that preclude us from proposing to approve it.

Proposed paragraph (c) of § 76.2 would provide that we could propose to approve a State or Tribal animal health plan unconditionally, or on the condition that the State or Tribe implement certain provisions of its plan within a specified period of time that it cannot implement immediately upon approval of the plan. We anticipate that this latter, conditional approval would be reserved for plans that set forth what we consider to be adequate activities and effective measures to address the risk of introduction of brucellosis or bovine tuberculosis into program animals within the State or Tribal lands, but that indicate that the State or Tribe will need to amend laws and/or regulations in order to have sufficient legal and regulatory authority to implement the plan. We request specific comment regarding whether there are other scenarios that should lead us to approve a plan conditionally.

Regardless of whether we propose to approve a plan unconditionally, or on the condition that the State or Tribe implement certain provisions of its plan within a specified period of time, we would publish a notice in the **Federal Register** announcing our proposed approval of the plan and making the plan available for public review and comment.

Prior to issuance of this notice, we would consult with the responsible person identified in the plan in order to ensure that the State or Tribe is prepared for us to make the plan, proposed amendments to the plan, and all reports required by the regulations in part 76 publicly available. We consider this provision to be necessary because, as we stated in the draft regulatory framework document, and as several commenters on that document concurred, transparency regarding the regulatory activities for brucellosis and bovine tuberculosis that a State or Tribe is conducting would be a foundation for the success and acceptance of the program both domestically and internationally.

Proposed paragraph (d)(1) of § 76.2 would set forth the determinations that we could make following a notice proposing unconditional approval of an animal health plan. If no comments are received on this notice, or if the comments received do not affect APHIS' conclusion that a plan may be approved unconditionally, we would publish a subsequent notice in the **Federal Register** announcing that the plan has been approved unconditionally, and designating the State or Tribe as a consistent State or Tribe.

If the comments received on the notice suggest the plan should be approved, but that the State or Tribe cannot implement certain provisions of its animal health plan immediately upon approval of the plan, and after reviewing the information, we agree, we would publish a subsequent notice in the **Federal Register** announcing that the plan has been approved conditionally, and designating the State or Tribe as a provisionally consistent State or Tribe. This notice would also specify the provisions of the plan that APHIS has determined cannot be implemented immediately and the time period in which they would have to be implemented. The notice could also specify restrictions on the interstate movement of program animals or other program requirements that would apply to the State or Tribe while it is in provisionally consistent status.

Finally, if the comments received suggest that the plan should not be approved, and, after reviewing the information, we agree, we would publish a subsequent notice in the **Federal Register** describing the comments that we received, our reevaluation of the plan in light of those comments, and our reasons why we cannot approve the plan.

Proposed paragraph (d)(2) of § 76.2 would set forth the determinations that we could make following a notice proposing conditional approval of an animal health plan. If no comments are received on the notice, or if the comments received do not affect our conclusion that the plan may be approved on the condition that the State or Tribe implement certain provisions of its plan within a specified period of time that it cannot implement immediately upon approval of the plan, we would publish a subsequent notice in the **Federal Register** announcing that the plan has been approved conditionally, and designating the State or Tribe as a provisionally consistent State or Tribe. This notice would specify the provisions of the plan that we have determined cannot be implemented immediately and the time period in which they must be implemented. The notice could also specify restrictions on the interstate movement of program animals or other program requirements that apply to the State or Tribe while it is in provisionally consistent status.

Alternatively, if the comments received suggest that the plan should not be approved, and, after reviewing the information, we agree, we would

publish a subsequent notice in the **Federal Register** describing the comments that we received, our reevaluation of the plan in light of those comments, and our reasons why we cannot approve the plan.

Proposed paragraph (e) would provide that, if we approve a State or Tribal animal health plan conditionally, designate the State or Tribe as provisionally consistent, and specify the period of time in which the State or Tribe must implement all provisions of its plan, we would publish a subsequent notice in the **Federal Register** announcing whether the State or Tribe has implemented all provisions of the plan within that period of time. If the State or Tribe has, the notice would announce that we consider the plan unconditionally approved, and have redesignated the State or Tribe as a consistent State or Tribe. If the State or Tribe has not, the notice would announce that we have withdrawn approval of the plan, and have redesignated the State or Tribe as an inconsistent State or Tribe. This second notice would be necessary in order to ensure that States and Tribes take appropriate action to be able to implement all provisions of their animal health plan in a timely manner.

Proposed paragraph (f) of § 76.2 would contain the processes for amendments to an animal health plan. Proposed paragraph (f)(1) of § 76.2 would provide that, if APHIS determines that the activities or measures specified in an approved animal health plan no longer correspond to the risk of spread of brucellosis or bovine tuberculosis, for example, if sources of brucellosis or bovine tuberculosis are discovered in a State or on Tribal lands in which no sources were previously known to exist, we would make ongoing approval of the plan contingent on the State or Tribe amending the plan in a manner that we approve of. The amended plan would have to be submitted to APHIS via the mail as provided within the Program Standards document, or electronically as provided in the Program Standards document.

Alternatively, if a State or Tribe wishes to amend its animal health plan, the State or Tribe would have to submit proposed amendments to the plan to us via the mail or electronically as provided in the Program Standards document. Amendments proposed by the State or Tribe would be subject to the notice-based approach specified in proposed paragraphs (b) through (d) of proposed § 76.2, although we anticipate that provisional approval of an amendment would be used sparingly, if at all.

Proposed paragraph (g) would state that APHIS reserves the right to conduct a review of States or Tribes at any point for compliance with their approved animal health plan. Such a compliance review could include site visits and/or documentation review.

State or Tribal Classifications (§ 76.3)

Proposed § 76.3 would contain the revised three-tier State and Tribal classification system of ''consistent,'' ''provisionally consistent,'' and ''inconsistent.'' It would also contain the considerations that would lead us to initially classify a State or Tribe as a consistent State or Tribe, and those considerations that may lead us to redesignate the State or Tribe to a lower classification. Finally, it would specify the measures that a State or Tribe must take in order to regain consistent status following a redesignation.

Proposed paragraph (a) of § 76.3 would provide that each State is classified as consistent, provisionally consistent, or inconsistent for brucellosis, and consistent, provisionally consistent, or inconsistent for bovine tuberculosis. It would also provide that Tribes are classified as consistent, provisionally consistent, or inconsistent for these diseases, provided that they have submitted a Tribal animal health plan to APHIS and we have approved it.

Proposed paragraph (b) of § 76.3 would set forth the conditions that would lead us to initially designate a State or Tribe as consistent, provisionally consistent, or inconsistent.

We would initially designate a State or Tribe as a consistent State or Tribe for brucellosis and bovine tuberculosis if we approve the State or Tribe's animal health plan unconditionally, that is, without provisos, in accordance with the process set forth in paragraph (d) of proposed § 76.2.

We would initially designate a State or Tribe as a provisionally consistent State or Tribe if we approve the State or Tribe's animal health plan on the condition that it implement certain provisions of its plan within a specified period of time that it cannot implement immediately upon approval of the plan, in accordance with the process set forth in paragraph (d) of proposed § 76.2.

We anticipate that, if this rule is finalized, we would receive animal health plans from all 50 States. We also anticipate that, even if commenters disclose deficiencies in the initial iteration of a State's plan that preclude us from approving it, a subsequent iteration of the plan would be approved.

However, in the event that a State elects not to draft an animal health plan, there would come a time when we would have to designate the State as inconsistent for brucellosis and bovine tuberculosis in order to fully implement the State and Tribal classification system and ascribe the appropriate regulatory requirements for the interstate movement of cattle and bison from that State (see proposed §§ 76.14 and 76.15). The date on which this would occur would be announced through a notice in the **Federal Register**.

If we do not receive an animal health plan from a Tribe, the Tribe would be considered part of the State in which the lands reside for purposes of the regulations in part 76. Hence we would not initially designate a Tribe as inconsistent for opting not to submit an animal health plan to APHIS.

Proposed paragraph (c) would contain the conditions that could lead us to redesignate a State or Tribe to a lower classification. Proposed paragraph (c)(1) would contain conditions that may lead us to redesignate a consistent State or Tribe as a provisionally consistent State or Tribe. We could redesignate the State or Tribe as provisionally consistent if:

- The State or Tribe fails to implement or perform an activity or maintain a measure specified within its animal health plan, and we determine that this failure may result in the spread of brucellosis or bovine tuberculosis.
- The State or Tribe fails to submit an annual report as specified in paragraph (a) of § 76.4.
- The State or Tribe fails to submit an initial epidemiological investigation situation report within 14 days of the period of time specified in paragraph (c) of § 76.4 for submitting such a report.
- The State or Tribe fails to submit an updated epidemiological investigation situation report as specified in paragraph (d) of § 76.4.
- On more than one occasion, the State or Tribe fails to submit a closing report as specified in paragraph (e) of § 76.4.
- The State or Tribe fails to meet national surveillance levels as these are specified within the National Surveillance Plans for brucellosis or bovine tuberculosis or as these are specified within an alternate State or Tribal plan that has been approved by APHIS. (We would include a footnote, footnote 3, directing individuals to paragraph (a) of § 76.6 for further information regarding this regulatory requirement.)
- The State or Tribe fails to conduct targeted surveillance of wildlife source

populations as specified in paragraph (b)(1) of § 76.6.

- The State or Tribe fails to conduct targeted surveillance of at-risk program animals as specified in paragraph (b)(2) of § 76.6.
- The State or Tribe has failed to conduct an investigation of a program animal with non-negative test results for brucellosis in accordance with paragraph (a) of § 76.7, or to send a report regarding those activities as specified in paragraph (b) of § 76.4.

Many of these conditions for redesignation would hinge on a State or Tribe's failure to meet certain regulatory requirements of part 76 either fully or in a timely fashion. Accordingly, we will discuss our rationale for these conditions below, within the context of our discussion of the regulatory requirements themselves. However, generally speaking, we would redesignate a State or Tribe as provisionally consistent if the State or Tribe fails to take or document an action that would otherwise demonstrate that it has fully implemented its animal health plan and is performing the activities and maintaining the measures specified in its animal health plan.

Proposed paragraph (c)(2) of § 76.3 would contain the conditions that may lead us to redesignate a State or Tribe as an inconsistent State or Tribe.[9] We could redesignate the State or Tribe as inconsistent if:

- The State or Tribe fails to implement or perform an activity or maintain a measure specified within its animal health plan, or fails to amend the plan in response to a request from APHIS, and APHIS determines that this failure has resulted or may result in the spread of brucellosis or bovine tuberculosis.
- On more than one occasion, the State or Tribe fails to submit an annual report as specified in paragraph (a) of § 76.4.
- On more than one occasion, the State or Tribe fails to submit an initial epidemiological investigation situation report within 14 days of the period of time specified in paragraph (c) of § 76.4 for submitting such a report.
- On more than one occasion, the State or Tribe fails to submit an updated epidemiological investigation situation report as specified in paragraph (d) of § 76.4.
- APHIS has terminated recognition of the State or Tribe's management area.
- The State or Tribe refuses to participate in or otherwise conduct surveillance as specified in paragraph (a) of § 76.6.
- On more than one occasion, the State or Tribe has failed to conduct an investigation of a program animal with non-negative test results for brucellosis in accordance with paragraph (a) of § 76.7, or to send a report regarding those activities as specified in paragraph (b) of § 76.4.
- The State or Tribe fails to conduct epidemiological investigations as specified in paragraph (b) of § 76.7.
- The State or Tribe fails to conduct affected herd management as specified in paragraph (e) of § 76.7.

Like the conditions that could lead us to redesignate a consistent State or Tribe as provisionally consistent, most of the conditions that could result in us redesignating the State or Tribe as inconsistent would stem from the State or Tribe's failure to meet certain regulatory requirements of part 76, and, therefore, will be discussed within the context of those requirements. However, as a general rule, we would redesignate a consistent State or Tribe as inconsistent if we determine that the State or Tribe has failed to take actions necessary to prevent brucellosis or bovine tuberculosis from being transmitted to program animals within the State or Tribe or necessary in order to prevent infected program animals from being moved interstate without appropriate mitigations. We would also redesignate the State or Tribe as inconsistent if, because of the State or Tribe's repeated failure to submit required reports, we lacked sufficient information regarding regulatory activities conducted in the State or Tribe, and thus had to consider program animals moved interstate from the State or Tribe to present an unknown risk of transmitting brucellosis and/or bovine tuberculosis to other animals.

Proposed paragraph (c)(3) of § 76.3 would contain conditions that could lead us to redesignate a provisionally consistent State or Tribe as inconsistent. In addition to the conditions that could lead us to redesignate a consistent State or Tribe as inconsistent, if the State or Tribe fails to implement provisions of its animal health plan or take required remedial measures within the period of time specified by APHIS for implementing these provisions or taking these measures, we would redesignate the State or Tribe as an inconsistent State or Tribe.

Proposed paragraph (d)(1) of § 76.2 would contain our notice-based redesignation process. It would state that, when APHIS redesignates a consistent State or Tribe as a provisionally consistent State or Tribe, we would publish a notice in the **Federal Register** announcing this redesignation. The notice would also state the reason or reasons that led to the redesignation and the remedial measures we consider necessary for the State or Tribe to complete in order to regain consistent status.

As much as possible, the remedial measures that we would specify in the notice would directly correlate to the reason for the redesignation. For example, if a State or Tribe is delinquent in submitting its annual report, the notice would require the report to be submitted.

Depending on the reason for the redesignation, the notice could also specify restrictions on the interstate movement of program animals or other program requirements that would apply to the State or Tribe while it is in provisionally consistent status. For example, if a State or Tribe is able to determine one of the herds in which a program animal with a non-negative test for brucellosis has resided, but cannot determine whether this herd also represents the herd of origin for the animal, the notice may place restrictions on the interstate movement of that herd, pending further investigation of the matter.

It is possible that, because the conditions that could lead us to redesignate a consistent State or Tribe as provisionally consistent vary, while a State or Tribe is in provisionally consistent status for one reason, such as failing to conduct an investigation of a program animal with non-negative test results for brucellosis, the State or Tribe could act or fail to act in a manner that would have otherwise led us to redesignate it to provisionally consistent status, such as failing to turn in a required report. In such instances, we would publish a notice in the **Federal Register** announcing what has occurred, and specifying additional remedial measures that the State or Tribe must take to regain consistent status.

If a State or Tribe completes the remedial measures we require for it to regain consistent status, we would publish a notice in the **Federal Register** announcing that we have redesignated the State or Tribe as a consistent State or Tribe. If the State or Tribe fails to take the required remedial measures, we would publish a notice in the **Federal Register** announcing that we have redesignated the State or Tribe as an inconsistent State or Tribe. Thus, provisionally consistent status would be

[9] We acknowledge that many of these conditions are substantially similar to those that could result in redesignation of a State to provisionally consistent status. A side-by-side comparison of the conditions for redesignation of a State to provisionally consistent and inconsistent status is found on pages 33–36 of the Program Standards document that accompanies this proposed rule.

a temporary classification; no State or Tribe would be classified as provisionally consistent indefinitely.

Whenever we immediately redesignate a consistent or provisionally consistent State or Tribe as an inconsistent State or Tribe, we would publish a notice in the **Federal Register** announcing this redesignation. In order for such a State or Tribe to regain consistent status, it would have to take appropriate remedial measures, as determined by APHIS, to address the issue or issues that led to redesignation to inconsistent status. It would also have to submit amendments to its animal health plan that reflect these measures, and submit any outstanding annual reports, initial investigation reports, initial or updated epidemiological investigation situation reports, and closing reports (see our discussion of proposed § 76.4 later in this document).

Finally, proposed paragraph (f) of § 76.3 would provide that lists of all consistent, provisionally consistent, and inconsistent States and Tribes would be located on the APHIS Web site. The lists would also be available at district VS offices.

Reporting Requirements (§ 76.4)

Proposed § 76.4 would contain reporting requirements for the consolidated brucellosis and bovine tuberculosis program. Proposed paragraph (a) of § 76.4 would provide that, within 60 days of the end of the reporting period (September 30), States would have to submit a completed annual report form to APHIS as provided in the Program Standards document.[10] This report form would provide us with information regarding the surveillance activities that the State has taken in the last reporting period.

Additionally, if a State has submitted an initial epidemiological situation report to us regarding detection of an affected herd within the State, but not submitted a corresponding closing report regarding this investigation (see below), we would require the State to submit additional information regarding epidemiological activities related to that incident undertaken during the reporting period within the annual report form. Finally, if the information contained in a State's animal health plan is no longer current, and the State has not already submitted proposed amendments to the plan to APHIS that incorporate these changes, the State would have to provide a summary of any changes to the information that have occurred during the reporting period along with the annual report form.

As we mentioned previously in this document, our approval of a State's animal health plan would depend on whether source populations of brucellosis or bovine tuberculosis exist within the State, and, if so, whether the State has specified adequate measures within the plan to address the risk that these sources present of spreading brucellosis and bovine tuberculosis to program animals. For States that do not have known source populations, and thus that do not have mitigation measures specified within their animal health plan, the activities summarized in the annual report form would provide us with evidence supporting the ongoing absence of such source populations and the corresponding lack of need for such mitigations. For States that have such populations, the annual report form would provide information regarding the efficacy of the State's mitigation measures in preventing the introduction of brucellosis and/or bovine tuberculosis into program animals. In a similar vein, by providing us with updated information regarding ongoing epidemiological investigations and, if necessary, updates to its animal health plan, a State would provide assurances to us that it is exercising due diligence in responding to disease outbreaks, and adequate maintenance and oversight of measures carried out under its animal health plan.

Without such information, we could determine that the risk that program animals moved interstate from the State present of transmitting brucellosis and/or bovine tuberculosis is uncertain or unknown. Hence, States that fail to submit an annual report form and supplementary updates in a timely fashion on one occasion could be redesignated to provisionally consistent status, and States that fail to do so on more than one occasion could be redesignated as inconsistent.

Proposed § 76.7 would contain requirements regarding epidemiological investigation activities that a State conducts. Because epidemiological investigations are conducted when animals are determined to be infected with or otherwise fail to test negative for a disease, in the absence of direct APHIS oversight of these investigations, regular reporting regarding the investigations would be of paramount importance to us in determining whether a State is accurately delineating the scope of a potential outbreak and taking adequate measures to preclude disease spread. Thus, proposed paragraphs (b) through (e) of § 76.4 would contain reporting requirements that pertain to epidemiological investigations.

Proposed paragraph (b) would provide that, whenever a State initiates an investigation of an animal with non-negative test results for brucellosis or an animal determined to be infected with brucellosis or bovine tuberculosis in accordance with proposed § 76.7, the State would have to provide a report regarding the investigation within 15 days of initiation of the investigation. Proposed paragraph (b) would differentiate between animals with non-negative test results for brucellosis and animals that are determined to be infected with brucellosis because secondary (corroboratory) tests to determine the presence or absence of brucellosis in program animals sometimes yield results that fall within the range of positive test results, but are sufficiently ambiguous to preclude the individuals conducting the test from making a determination that the animal is infected with brucellosis. We would not make such a differentiation for animals with non-negative test results for bovine tuberculosis, because such animals are customarily taken to necropsy for a determination regarding the presence or absence of infection.

Proposed paragraph (c) of § 76.4 would state that, whenever a State initiates an epidemiological investigation of an affected herd in accordance with § 76.7, the State must provide a report of that epidemiological investigation to APHIS within 15 days of the date when the State is notified that an animal from the herd has been determined to be infected with brucellosis or bovine tuberculosis.

Because, in the absence of such initial reports, APHIS would lack information regarding the discovery of known or potentially infected animals within a State, and thus could be unable to evaluate whether the State is acting in a manner that is likely to delineate the scope of disease infection, States that fail to submit such reports in a timely manner on one occasion could be redesignated as provisionally consistent, and States that fail to submit such reports in a timely manner on multiple occasions could be redesignated as inconsistent.

Epidemiological investigations often take several months to complete, and a particularly complex investigation may take several years. Additionally, activities that a State may take in the first 15 days of an investigation may be inconclusive. Therefore, proposed paragraph (d) of § 76.4 would provide that every 4 weeks following submission

[10] A draft template of the annual report form is found in Appendix 3 of the Program Standards document.

of an initial situation report or initial epidemiological situation report, and more frequently at the Administrator's request, a State would have to submit subsequent reports updating information in the initial situation report or epidemiological investigation situation report. (Generally speaking, we would require States to submit reports on a more frequent basis if the investigation was particularly complex, *e.g.,* when it encompassed many herds or animals or covered a large geographical area.)

Because these reports would help us determine whether a State is taking adequate measures to respond to a disease outbreak, failure to submit such updates on one occasion could result in redesignation to provisionally consistent status; failure to do so on more than one occasion could result in redesignation to inconsistent status.

Proposed paragraph (e) of § 76.4 would state that, within 60 days following the conclusion of an epidemiological investigation of an affected herd, a State must submit a closing report to APHIS. In proposed § 76.7, we consider an epidemiological investigation of an affected herd complete if a State identifies, places interstate and intrastate movement restrictions on, and, determines the disease status of all test-eligible animals in:

- Any herd into which program animals from the affected herd may have been moved;
- Any herd which program animals in the affected herd may have originated from or resided in; and
- Any herd, individual program animals, or other animals that are susceptible to brucellosis or bovine tuberculosis that may have commingled with or otherwise been exposed to the affected herd, as determined by the Administrator and communicated to the State.

Since a State that concludes an epidemiological investigation would have taken measures that we consider adequate to delineate the scope of disease infection in herds of program animals in the State, failure to submit a closing report, unlike failure to submit other reports, would not necessarily lead us to consider program animals in the State an unknown risk of transmitting brucellosis or bovine tuberculosis. Hence, failure to submit a timely closing report on one occasion would not necessarily result in redesignation to provisionally consistent status. However, failure to submit a closing report on more than one occasion could be indicative of greater regulatory lapses; accordingly, it would be likely to result in redesignation to provisionally consistent status.

As we mentioned previously in this document, proposed § 76.5 would allow States to request APHIS recognition of a management area for brucellosis or bovine tuberculosis within the State. Proposed paragraph (f) of § 76.4 would provide that additional reporting requirements for States with such areas are specified in paragraph (f) of § 76.5.

Proposed paragraph (g) of § 76.4 would state that, if a consistent State is redesignated as provisionally consistent, additional reporting requirements for the State may be specified in the notice in the **Federal Register** that announces such redesignation. For example, if a State is redesignated as provisionally consistent for failing to conduct adequate surveillance of wildlife source populations for brucellosis or bovine tuberculosis, we could require the State to provide periodic updates regarding implementation of this surveillance.

Proposed paragraph (h) of § 76.4 would state that the requirements in § 76.4 pertain to Tribes, provided that that they have submitted a Tribal animal health plan to APHIS for review and approval in accordance with the process set forth in § 76.2, and APHIS has approved the animal health plan. Otherwise, we would expect activities conducted on Tribal lands within a State to be reflected in any report that the State submits.

Recognized Management Areas (§ 76.5)

Bovine tuberculosis is known to exist in a portion of Michigan immediately south of the Upper Peninsula and in a portion of Michigan northeast of the Huron National Forest. Because bovine tuberculosis is endemic within wildlife in those areas, there are periodic detections of the disease in program animals in the areas, and Michigan has long had control measures in place to prevent the spread of bovine tuberculosis from these two areas. However, because part 77 relies on a prevalence-based State classification system, if Michigan were considered as a single geographical region, it would not have the highest classification for bovine tuberculosis, accredited-free, although the majority of the State has not detected bovine tuberculosis in program animals.

Hence, part 77 allows a State to request a different classification for zones in the State that have a higher prevalence for bovine tuberculosis than other areas of the State, provided, among other requirements, that the State conducts surveillance of animal species in the zone to detect bovine tuberculosis infection in those animals, has a regulatory framework in which detections of bovine tuberculosis in livestock or wildlife in the zone are reported to State animal health officials, demonstrates to APHIS that it has sufficient financial and legal resources to enforce the zone, and enters into a memorandum of understanding with APHIS regarding any other additional conditions for zone recognition that we determine necessary in order to approve a State's request.

Brucellosis is endemic in wildlife in a geographical area consisting of portions of Montana, Idaho, and Wyoming, referred to below as the Greater Yellowstone Area, or GYA. To prevent the spread of brucellosis from this area, we issued the December 2010 interim rule referenced previously in this document. This rule had the effect of requiring Montana, Idaho, and Wyoming to draft brucellosis management plans in which they specified surveillance of and mitigation measures for wildlife reservoirs within their portion of the GYA.

In the draft regulatory framework document, we proposed an approach that would have consolidated aspects of these two approaches to zoning. We proposed that, if brucellosis or bovine tuberculosis was detected in a region of the United States and the States or Tribes with land in that region were unable to eradicate the disease within a year, the States or Tribes would have to develop a long-term containment plan in order to retain consistent status. We proposed that the containment plan would have to be based on epidemiological information gathered from the outbreak regarding livestock or wildlife populations in the region and extent of disease within these livestock and wildlife populations. We also proposed that the plans would have to consider strategies such as herd testing of program animals within the region, movement restrictions on program animals moved out of the region, and traceability, *i.e.,* official identification and recordkeeping requirements, for these program animals to prevent the spread of disease from the region. Finally, we proposed that all containment plans would have to be eradication-based.

Commenters were generally supportive of the concept of long-term containment plans. However, several commenters had concerns with aspects of our proposed approach. Commenters pointed out that, under the approach, if a region that was covered by a containment plan encompassed a geographical area in multiple States, States could be held accountable for

regulatory lapses in a neighboring State. The commenters pointed out that a State has little authority regarding animal health activities conducted in other States, and that the approach in the framework document could result in States being reclassified to lower statuses for reasons beyond their control.

Similarly, commenters also pointed out that, while most State animal health authorities may monitor wildlife reservoirs of brucellosis or bovine tuberculosis, their authority to conduct such monitoring is limited to instances in which these reservoirs present a risk of transmitting disease to livestock in the State. Accordingly, they expressed concern that the approach in the document would require States to draft containment plans if brucellosis or bovine tuberculosis were discovered in wildlife, in the absence of any demonstrable risk of program animals becoming infected.

Several commenters stated that eradication of brucellosis or bovine tuberculosis in areas in which it has become endemic, particularly in wildlife populations, would prove difficult, if not impracticable, and suggested that containment plans would not necessarily have to be eradication-based to be effective.

Finally, several commenters suggested that States not be forced to draft containment plans, but, rather, have the option to do so upon determining that a containment plan would help prevent the spread of brucellosis or bovine tuberculosis within the State.

In light of these comments, proposed § 76.5 would establish a process for States or Tribes to request recognition of management areas for brucellosis or bovine tuberculosis in the State or Tribal lands. As we mentioned previously in this document, a management area would be a clearly delineated geographical area in which a State or Tribe has detected brucellosis or bovine tuberculosis, has determined that there is a risk of transmission of brucellosis or bovine tuberculosis to program animals, and has taken or proposes to take measures to control the spread of the brucellosis or bovine tuberculosis within and from the area and/or to eradicate the disease within the area.

Proposed paragraph (a) of § 76.5 would state that a State or Tribe may request APHIS recognition of a management area within the State or Tribal lands. Thus States and Tribes would not be required to request recognition of management areas, and could retain consistent status even if they elect not to establish a management area. However, if a source of brucellosis or bovine tuberculosis is known to exist in a State or on Tribal lands, and the State or Tribe elects not to establish and request APHIS recognition of a management area, the State or Tribe would have to provide evidence in their animal health plan that all program animals in the State or Tribal lands are not similarly exposed to this source, or would have to consider all program animals in the State or Tribe commensurate with respect to risk and propose mitigations in their animal health plan accordingly.

Proposed paragraph (b)(1) of § 76.5 would require a State or Tribe without an animal health plan that has been approved by APHIS to request recognition of a management area when it submits an animal health plan to APHIS. Proposed paragraph (b)(2) of § 76.5 would require a State or Tribe with an approved animal health plan to request recognition of a management area by submitting an amendment to its animal health plan regarding the management area.[11] Proposed paragraph (c) of § 76.5 would contain requirements for a request to recognize a management area. Proposed paragraph (c)(1) would contain requirements for States or Tribes without zones for bovine tuberculosis or areas covered by a brucellosis management plan at the time a rule that finalizes this proposed rule becomes effective.

Such States or Tribes would have to include the following categories of information as part of a request to recognize a management area:

- A description of the geographical area that the State or Tribe requests to be recognized as a management area. The description would have to specify continuous and uninterrupted boundaries for the management area.
- A description of the assessments and activities that the State or Tribe has conducted or plans to conduct to support the specified boundaries for the management area and a timeline of implementation of these activities. At a minimum, the activities specified would have to provide assurances that the boundaries for the management area continually reflect current epidemiological knowledge about the extent of disease and risk of transmission of disease within and from the area, and would have to include:
  - Epidemiological investigations.
  - Surveillance activities within the management area to determine or further delineate sources of brucellosis and/or bovine tuberculosis.
  - Surveillance activities outside the boundaries of the management area sufficient to detect brucellosis or bovine tuberculosis infection in program animals that originate from or are otherwise related to the management area.

The activities would have to include epidemiological investigations because such investigations would be necessary to determine the scope of infection within the area.

The activities would have to include surveillance within the management area to determine or further delineate sources of brucellosis and/or bovine tuberculosis because, in certain instances, epidemiological investigations may not be able, on their own, to discover a disease reservoir of brucellosis or bovine tuberculosis within an area. For example, Federal and State officials within Michigan conducted independent epidemiological investigations for several years before they discovered that wild cervid populations in the northeast of the State were serving as a common source of infection. This discovery played a key role in delineating the geographical area covered by their zone request.

The activities would have to include surveillance activities outside the boundaries of the management area because, historically, after a State has set the initial boundaries of an area in which it knows brucellosis or bovine tuberculosis to exist, affected herds have been discovered beyond these boundaries.

- A description of the known sources of brucellosis or bovine tuberculosis that pose a risk of disease introduction into program animals within and surrounding the management area, and an assessment of the likelihood of spread of brucellosis or bovine tuberculosis from these sources to program animals. This description would have to include:
  - The approximate number of herds, individual program animals, and susceptible wildlife populations within the management area and in the area surrounding the management area as this surrounding area is determined in consultation with an epidemiologist designated by the District Director.
  - The number of affected herds or wildlife populations detected within the management area since the first investigation or surveillance activity specified by the State or Tribe in their request was conducted, the approximate number of animals in these herds or source populations, and the approximate prevalence of brucellosis

[11] A template for a request for recognition of a management area is found in Appendix 8 of the Program Standards document.

or bovine tuberculosis infection in these herds or populations during that time period.

- The potential for exposure of program animals to these known affected herds or wildlife populations.
- Any factors, other than mitigation measures maintained by the State or Tribe, that may influence this potential for exposure.
- An assessment of the likelihood of transmission of brucellosis or bovine tuberculosis from known affected herds or wildlife populations to program animals within and surrounding the management area.

The information that we would require regarding source populations in a request for recognition of a management area is modeled on the information regarding source populations that we would require in an animal health plan. However, while States and Tribes would have to provide the geographic distribution of source populations within their animal health plan, we would not require this information in a request for recognition of a management area. This is because we would expect the boundaries of the management area to reflect the geographic distribution of the source populations.

- A description of the measures that the State or Tribe has implemented or would implement to mitigate the risk that program animals within the State or Tribal lands will become infected with brucellosis or bovine tuberculosis, a timeline for implementation of these measures, and the means by which the State or Tribe has monitored and enforced or plans to monitor and enforce these measures. For all management areas, measures would have to include conditions for the movement of program animals from the management area, herd testing of at least a targeted representative sample of herds of program animals within the area, and change-of-ownership testing of all test-eligible program animals that reside within the area. For management areas for brucellosis, the measures would also have to include an official brucellosis vaccination program.

We would require the State or Tribe to specify conditions for the movement of program animals from the management area because we would not consider the unrestricted movement of program animals from the management area to be appropriate given the presence of brucellosis or bovine tuberculosis within the area. We would require herd testing and change-of-ownership testing within the management area because, although such testing is not a mitigation, it would allow us to evaluate the efficacy of the mitigations implemented within the management area by the State or Tribe. We would require implementation of an official brucellosis vaccination program for management areas for brucellosis because we consider program animals in a management area for brucellosis to be at risk of becoming infected with brucellosis, and vaccination is an effective prophylactic tool to prevent such infection.

- A citation of or hyperlink to the laws and regulations that authorize the State or Tribe's establishment of the management area.
- A description of the personnel that the State or Tribe has used or plans to use in order to implement or perform activities or maintain measures associated with the management area. This description would have to demonstrate that the State or Tribe has sufficient personnel to implement and perform these activities and maintain these measures, and would have to include:
  - The name, contact information, and affiliation of the person within the State or Tribe who would assume responsibility for implementation and performance of activities and maintenance and enforcement of measures associated with the management area.
  - The name, contact information, and affiliation of all personnel assigned to the implementation and performance of activities and maintenance and enforcement of measures associated with the management area.
  - The role or roles assigned to these personnel.
- Information demonstrating that all program animals that are moved from the management area are or will be required to be officially identified prior to movement.

We would require official identification of program animals moved from the area in order to facilitate traceback if any of these animals are determined to be infected with brucellosis or bovine tuberculosis.

Proposed paragraph (c)(2) of § 76.5 would state that, if a State had a geographical area designated as a zone for bovine tuberculosis or covered by a brucellosis management plan prior to the effective date of a rule finalizing this proposed rule, and the State wishes the geographical area to continue to be recognized as a management area, the State's request for recognition of that area as a management area would only need to contain those categories of information that the State has not already submitted to APHIS.

Proposed paragraph (d) of § 76.5 would provide that APHIS would review each proposal for recognition of a management area in accordance with the process set forth in proposed § 76.2 for review of an animal health plan or amendment to an animal health plan.

Proposed paragraph (e) of § 76.5 would provide that, in communicating our determination to approve or not approve an animal health plan or amendment to an animal health plan in accordance with the process set forth in § 76.2, we would also communicate our determination to recognize or not recognize the requested management area. It would also provide that, if we recognize the management area, the request for recognition of the area would be considered to be part of the State or Tribe's animal health plan. Finally, it would provide that we would not recognize a management area in a State or on Tribal lands if we determine not to approve that State or Tribe's animal health plan. We would not recognize the area because, if concerns regarding the approach that the State or Tribe presents in its animal health plan preclude us from approving the plan, these same concerns would preclude us from evaluating the adequacy of the measures specified in the request for recognition of the management area.

As we mentioned previously in this document, proposed paragraph (f) of § 76.5 would contain additional reporting requirements for States and Tribes with recognized management areas. It would require that, in addition to the annual reporting requirements contained in paragraph (a) of § 76.4, States or Tribes with recognized management areas would have to submit a separate annual report form for each recognized management area in the State or Tribe. These reports would provide context for the information contained in the annual report form for the entire State or Tribe by disclosing which portion of the information contained on that form pertains to activities conducted within the management area.

Proposed paragraph (g) of § 76.5 would provide that, if a State or Tribe with a recognized management area wishes to expand or contract the geographical boundaries of the management area, or determines that any information in its request for recognition of the management area has substantively changed, the State or Tribe would have to submit amendments to its animal health plan that reflect these changes to APHIS in accordance with the process set forth in proposed § 76.2.

Proposed paragraph (h) of § 76.5 would deal with termination of management areas. Proposed paragraph (h)(1) would provide that, if a State or Tribe wishes APHIS to recognize the State or Tribe's termination of the management area, it would have to submit amendments to its animal health plan that reflect this termination in accordance with the process set forth in proposed § 76.2. The State or Tribe would also have to provide APHIS with an explanation why the management area was terminated. Depending on the information provided in this explanation, we may also expect the State or Tribe to submit amendments to its animal health plan that address any additional risk of introduction of brucellosis or bovine tuberculosis into program animals that may arise because of termination of the management area.

Proposed paragraph (h)(2) of § 76.5 would provide that, if we determine that a State or Tribe has failed to implement or maintain measures specified within its request for recognition of a management area for brucellosis or bovine tuberculosis, we would terminate recognition of all management areas for the disease or diseases within the State or Tribal lands. We would also redesignate the State or Tribe as an inconsistent State or Tribe for the disease or diseases. This is because States and Tribes with management areas would have known sources of brucellosis or bovine tuberculosis within them, and a State or Tribe's failure to implement or maintain measures to address the risk of disease transmission presented by this source would necessarily lead us to the conclusion that the disease status of program animals within the State or Tribal lands is uncertain or unknown.

If we redesignate a State or Tribe as an inconsistent State or Tribe for brucellosis or bovine tuberculosis, we would also terminate recognition of all management areas for that disease within the State or Tribal lands as part of this redesignation. This is because if we redesignate a State or Tribe as inconsistent, it would indicate that we have significant concerns regarding the control program for brucellosis or bovine tuberculosis within the State or Tribal lands, including activities and measures conducted within the management area.

Proposed paragraph (h)(3) of § 76.5 would provide that, if a State or Tribe requests recognition of termination of a management area, we would review the request in accordance with the process set forth in proposed § 76.2 for review of an amendment to an animal health plan.

Proposed paragraph (h)(4) of § 76.5 would provide that we would communicate our determination regarding termination of a recognized management area in accordance with the process set forth in § 76.2 for communication of a determination regarding amendments to an animal health plan.

Surveillance Requirements (§ 76.6)

As we mentioned in our discussion of proposed § 76.2, States and Tribes would have to provide a description of surveillance activities for brucellosis or bovine tuberculosis in animals within the State or Tribal lands that are being conducted or would be conducted in the State or Tribe. Proposed § 76.6 would provide minimum requirements regarding these surveillance activities.

Proposed paragraph (a) of § 76.6 would require all States to agree to participate in the National Surveillance Plans for Brucellosis and Bovine Tuberculosis, which would be located on the APHIS Web site, or to conduct equivalent surveillance in a manner approved by APHIS.

Participation in the National Surveillance Plan for Bovine Tuberculosis would require States to perform monitoring of slaughter inspection within the State that is conducted by State meat inspection personnel. Pursuant to FSIS regulations, all cattle and bison slaughtered for wholesale or retail purposes at a recognized slaughtering establishment within the United States are inspected for evidence of tuberculosis by either FSIS or State meat inspection personnel.

States would also be required to monitor caudal fold testing for bovine tuberculosis within the State that is conducted by qualified accredited veterinarians (see discussion later in this document, under the heading ''Official tests for brucellosis and bovine tuberculosis, official testing laboratories, and official testers (§ 76.17)'').

If we do not require a State to conduct brucellosis surveillance or provide data regarding ongoing brucellosis surveillance conducted in the State, the State would still be considered a participant in the National Surveillance Plan for Brucellosis. Participation for certain States could be made contingent on designated recognized slaughtering establishments in the States collecting blood samples for official testing from a prescribed percentage of cattle and bison slaughtered at the establishments. This slaughter surveillance requirement currently exists in part 78, and we considered it necessary to incorporate it into the National Surveillance Plan in order to maintain an appropriate measure of passive surveillance for brucellosis throughout the United States given the reservoirs of the disease in certain areas of the United States.

APHIS could also request certain States to provide additional data on routine surveillance for brucellosis in their State that is conducted at areas of high concentration and frequent commingling of cattle and bison, such as livestock markets, cattle feeders' premises, and regional exhibitions.

We are aware that States may prefer to draft their own surveillance plan rather than participate in the National Surveillance Plans for Brucellosis and Bovine Tuberculosis. We would allow States to do so, provided that they propose to conduct what we consider to be equivalent surveillance to that specified in the National Plans and we approve the plans.

If a State fails to meet the surveillance levels set forth in the National Surveillance Plans or their own approved plans, this could result in redesignation to provisionally consistent or inconsistent status. We consider the possibility of such redesignations to be appropriate because failure to conduct adequate surveillance could adversely impact our ability to estimate the prevalence levels for brucellosis or bovine tuberculosis within a State. Similarly, surveillance data collected under the plans would be necessary for us to determine the national prevalence for brucellosis and bovine tuberculosis in the United States, and because, as we mentioned previously in this document, the regulations in part 76 would be predicated on the United States having low national prevalence levels for the diseases. Thus, if we were to lack sufficient data to determine these prevalence levels, this would deprive us of our primary means of evaluating the ongoing efficacy of the regulations in part 76.

If a consistent or provisionally consistent State refuses to participate in the plans or draft and implement their own, this would result in redesignation to inconsistent status. Additionally, if an inconsistent State refuses to participate in the plans or draft and implement their own, the interstate movement of program animals from that State would be subject to such restrictions or prohibitions as the Administrator considers necessary to prevent the dissemination of brucellosis or bovine tuberculosis from the State; we would announce such restrictions in a notice in the **Federal Register**.

We believe such remedial measures would be appropriate for three reasons. First, this refusal to conduct

surveillance would significantly and adversely impact our ability to gauge national prevalence levels for brucellosis or bovine tuberculosis. Second, this refusal would render it difficult for us to evaluate whether a State's animal health plan is addressing the risk of spread of brucellosis or bovine tuberculosis within and from the State; as it is today, slaughter surveillance would remain our primary gauge of determining brucellosis or bovine tuberculosis risks within a State under the consolidated brucellosis and bovine tuberculosis program. Third, this refusal would deprive us of assurances that program animals moved interstate from the State do not present a risk of transmitting brucellosis or bovine tuberculosis to other animals.

Proposed paragraph (b) of § 76.6 would contain additional surveillance requirements for States that have known sources of brucellosis or bovine tuberculosis.

Proposed paragraph (b)(1) would contain requirements for surveillance of wildlife source populations. It would state that, if a consistent or provisionally consistent State has identified a known source of brucellosis or bovine tuberculosis transmission within wildlife in the State in its animal health plan and determined that this source population presents a risk of transmitting brucellosis or bovine tuberculosis to program animals, in order to maintain consistent or provisionally consistent status, the State would have to conduct surveillance of that source population in a manner approved by APHIS as sufficient to detect brucellosis or tuberculosis in an animal within the source population. A consistent State that fails to conduct such surveillance would be redesignated as provisionally consistent, while a provisionally consistent State that fails to conduct such surveillance could be redesignated as inconsistent.

Proposed paragraph (b)(2) of § 76.6 would provide requirements for targeted surveillance of at-risk populations, that is, populations that are at risk of becoming infected with brucellosis or bovine tuberculosis because of transmission of the diseases from source populations. It would provide that, if a consistent or provisionally consistent State has identified a known source of brucellosis or bovine tuberculosis transmission in the State in its animal health plan and has determined that this source population presents a risk of transmitting brucellosis or bovine tuberculosis to program animals, in order to maintain consistent or provisionally consistent status, the State would have to conduct annual herd testing of all herds of at-risk program animals, or alternatively, a statistically representative sample of those herds, as determined by APHIS. A consistent State that fails to conduct such surveillance would be redesignated as provisionally consistent. A provisionally consistent State that fails to conduct such surveillance would be redesignated as inconsistent.

Such testing would be necessary in order to help us evaluate the efficacy of any mitigation measures the State has implemented to prevent transmission of brucellosis or bovine tuberculosis from known source populations to program animals. Hence, failure to conduct such testing would result in redesignation.

Proposed paragraph (c) of § 76.6 would provide requirements for surveillance within recognized management areas. It would require States to conduct surveillance within the management area in the manner specified within that section of the State's animal health plan that pertains to the management area. Since States or Tribes would have to specify surveillance activities in any request for APHIS to recognize a management area, failure to conduct such surveillance would constitute failure to implement or maintain a measure specified in the request. Hence failure to conduct such surveillance would result in termination of recognition of the management area and redesignation of the State as an inconsistent State.

Proposed paragraph (d) of § 76.6 would provide that, if a consistent State is redesignated as provisionally consistent, additional surveillance requirements for the State may be specified in the notice in the **Federal Register** that announces this redesignation.

Proposed paragraph (e) of § 76.6 would provide that the requirements in the section pertain to Tribes, provided that they have submitted a Tribal animal health plan to APHIS for review and approval in accordance with the process set forth in § 76.2, and APHIS has approved the animal health plan.

Epidemiological Investigations and Affected Herd Management (§ 76.7)

Proposed § 76.7 would contain minimum requirements regarding epidemiological investigation and affected herd management activities conducted under an animal health plan.

Proposed paragraph (a) of § 76.7 would provide that, if a program animal has a non-negative test result for brucellosis, within 15 days of receiving notification of these results, the State in which the animal was detected would have to initiate an investigation to determine the herd from which the animal originated and all herds in which it has resided.

As we mentioned previously in this document, historically, there have been occasions when secondary (corroboratory) tests to determine the presence or absence of brucellosis in program animals have yielded results that fell within the range of positive test results, but were sufficiently ambiguous to preclude the individuals conducting the test from making a determination that the animals were infected with brucellosis. However, when we have traced such animals back through production channels to their herd of origin, we have discovered animals that are infected with brucellosis.

For this reason, a consistent State that fails to conduct such an investigation on one occasion would be redesignated as provisionally consistent, while a consistent or provisionally consistent State that fails to conduct such an investigation on multiple occasions could be redesignated as inconsistent.

Proposed paragraph (b) § 76.7 would provide protocols related to other epidemiological investigations. These protocols would be consistent with generally accepted best practices for epidemiological investigations.

Proposed paragraph (b)(1) would provide a protocol for epidemiological investigations following a determination that a program animal is infected with brucellosis or bovine tuberculosis, without a concurrent determination that it has belonged to an affected herd. Such investigations would usually be initiated by discovery of an infected animal at slaughter, but could also be initiated when an animal is determined to be infected with brucellosis or bovine tuberculosis after testing positive for the disease at a livestock market, auction barn, exhibition, or other point where the animal is segregated from its herd for commercial purposes.

In such instances, within 15 days of the determination that the program animal is infected, the State in which the infected animal was detected would have to identify the herd from which the infected animal originated and all herds in which it has resided, impose the restrictions specified in proposed §§ 76.9 and 76.10 on the interstate movement of animals from those herds, impose substantially similar restrictions on the intrastate movement of program animals from the herds, and begin determining the disease status of all test-eligible animals in the herds. (Proposed § 76.9 would prohibit the movement of animals from a herd containing a reactor or suspect for brucellosis or tuberculosis, other than

the movement of the reactor or suspect itself, until the disease status of all test-eligible animals in the herd is determined. Proposed § 76.10 would provide conditions for the interstate movement of reactor, suspect, and exposed program animals.)

Proposed paragraph (b)(2) would provide a protocol for epidemiological investigations following a determination that a herd of program animals is affected with brucellosis or bovine tuberculosis. In such instances, within 15 days of this determination, the State in which the herd resides would have to identify and impose the restrictions specified in proposed §§ 76.9 and 76.10 on the interstate movement of the following animals, impose substantially similar restrictions on intrastate movement, and begin determining the disease status of all test-eligible animals in those herds:

- Any herd into which program animals from the affected herd may have been moved; and
- Any herd from which program animals in the affected herd may have originated or in which they may have resided; and
- Any herd, individual program animals, or other animals that are susceptible to brucellosis or bovine tuberculosis that may have commingled with or otherwise been exposed to the affected herd, as determined by the Administrator and communicated to the State.

Proposed paragraph (b)(3) of § 76.7 would require that, if the State in which an infected animal or affected herd was detected determines that any of the herds specified in proposed paragraph (b)(2) are located in a different State than the infected animal or affected herd, the State in which the infected animal or affected herd was detected would have to notify both that State and APHIS, in writing, within 3 days. APHIS notification would have to be submitted to the address provided within the Program Standards document. This notification would allow surrounding States to conduct their own epidemiological investigations in a timely manner, and would help APHIS to oversee and coordinate any aspects of the investigations related to interstate commerce.

Proposed paragraph (b)(4) would provide a protocol for epidemiological investigations following a determination that a non-program animal is infected with brucellosis or bovine tuberculosis, if the Administrator determines that this animal presents a risk of transmitting brucellosis or bovine tuberculosis to program animals. In such instances, the State or States surrounding the detection would have to identify all herds that may have been exposed to brucellosis or bovine tuberculosis because of this detection, as determined by the Administrator and communicated to the States. The States would also have to impose the restrictions specified in §§ 76.9 and 76.10 on the interstate movement of animals from those herds, impose substantially similar restrictions on intrastate movement, and determine the disease status of all test-eligible animals in those herds. We would impose this requirement on all States surrounding the infected animal, as determined by the Administrator, because, if migratory wildlife is discovered to be infected with brucellosis or bovine tuberculosis near a State's border, the migration patterns of this wildlife could have exposed program animals in other States to the disease.

Proposed paragraph (b)(5) of § 76.7 would provide a protocol for epidemiological investigations if an animal infected with brucellosis or bovine tuberculosis is discovered on or has been determined to have originated from a calf raiser's premises or feedlot, that is, a location where there is frequent commingling of cattle or bison that originate from different premises. In such instances, the State in which the calf raiser's premises or feedlot is located would have to conduct an epidemiological investigation of that premises or feedlot according to a method that has been approved by the Administrator. A draft of an approved method for conducting such an investigation is set forth in the Program Standards document.

While the protocols and procedures set forth in proposed paragraph (b) are grounded in generally accepted best practices for conducting epidemiological investigations, we recognize that, in certain instances, a State may exercise due diligence in conducting such investigations, yet either not be able to determine all potentially affected herds, or not be able to do so within the timeframe specified within the regulations. In such instances, States could submit an alternate protocol for conducting an epidemiological investigation to APHIS to the address provided in the Program Standards document. If the Administrator authorizes this protocol, the State could employ it in lieu of the protocols contained in the regulations, without risking a possible redesignation to a lower status (see our discussion below of proposed paragraph (d) of § 76.7).

Proposed paragraph (c) would establish conditions for determining whether a herd is affected with brucellosis or bovine tuberculosis. If all test-eligible program animals in a herd under investigation are determined to be negative for brucellosis or bovine tuberculosis, the herd would not be an affected herd. In such instances, no further action would be required and the State could remove restrictions on the movement of animals in those herds. Conversely, if any test-eligible animals in a herd under investigation are determined to be infected with brucellosis or bovine tuberculosis, the herd would be considered to be an affected herd.

Proposed paragraph (d) of § 76.7 would contain consequences for failure to conduct an epidemiological investigation in accordance with the section. If a consistent or provisionally consistent State does not follow the protocols in § 76.7 or another protocol that APHIS has authorized, the State would be redesignated as inconsistent. This is because these protocols represent generally accepted best practices for all epidemiological investigations. Thus, failure to adhere to them, or to submit an alternate protocol to us for evaluation, would necessarily lead us to consider the disease status of program animals within the State or Tribal lands uncertain or unknown, and to have concerns regarding the overall adequacy of the regulatory program for brucellosis or bovine tuberculosis in the State.

For this reason, if an inconsistent State, that is, a State about which we already have such concerns, fails to conduct epidemiological investigations in accordance with the section, the interstate movement of program animals from that State would be subject to such restrictions or prohibitions as the Administrator considers necessary to prevent the dissemination of brucellosis or bovine tuberculosis from the State. In such instances, once imposed by the Administrator, the restrictions or prohibitions would be announced through a notice in the **Federal Register**.

Proposed paragraph (e) of § 76.7 would provide requirements for management of affected herds. States would have to manage affected herds through depopulation, or through a test-and-remove protocol modeled on the protocol contained in the April 2010 Federal Order.[12] The protocol would have to demonstrate that:

- The State has implemented and is enforcing movement restrictions on the affected herd.

[12] See footnote 1.

• The States has implemented and is enforcing an affected herd management plan for the affected herd to prevent the spread of brucellosis or bovine tuberculosis.

• The State is implementing and is conducting a protocol to periodically test program animals in the affected herd for brucellosis or bovine tuberculosis and to remove and destroy those animals that do not test negative.

• The State has a protocol in place to conduct periodic assurance testing of the herd once the test-and-remove protocol is complete.

The test-and-remove protocol would have to place movement restrictions on the affected herd because, unless a program animal in an affected herd has undergone periodic testing to determine its disease status over an extended period of time and has tested negative for brucellosis or bovine tuberculosis each time, we consider the animal to present a risk of transmitting brucellosis or bovine tuberculosis to other program animals. We would require the State to implement and maintain an affected herd management plan for this same reason.

We would require removal and destruction of all animals that do not test negative to this periodic testing because such animals could be infected with brucellosis or bovine tuberculosis and thus could serve as an inoculum for the remainder of the herd if they are not removed and destroyed.

We would require assurance testing in order to monitor the herd for possible reintroduction of disease following conclusion of the test-and-remove protocol.

Proposed paragraph (f) of § 76.7 would contain consequences for failure to conduct affected herd management in accordance with the section. If a consistent or provisionally consistent State fails to do so, it would be redesignated as inconsistent. If an inconsistent State fails to do so, the interstate movement of program animals from that State would be subject to such restrictions or prohibition as the Administrator considers necessary to prevent the dissemination of brucellosis or bovine tuberculosis from the State. In such instances, the restrictions or prohibitions would be announced through a notice in the **Federal Register**.

Proposed paragraph (g) would state that the requirements in the section pertain to Tribes, provided that they have submitted a Tribal animal health plan to APHIS for review and approval in accordance with the process set forth in proposed § 76.2, and APHIS has approved the animal health plan.

Interstate Movement Requirements—General Categories of Livestock (§§ 76.8 through 76.10)

Interstate Movement of Infected Livestock Generally Prohibited (§ 76.8)

Proposed § 76.8 would state that, except as provided in paragraph (d)(7) of 9 CFR 71.3, the interstate movement of any livestock known to be infected with brucellosis or bovine tuberculosis is prohibited. Paragraph (d)(7) of § 71.3 provides that, in certain instances, the Administrator may authorize the interstate movement of livestock known to be infected with a communicable disease of livestock such as brucellosis and bovine tuberculosis, subject to such conditions as he or she may prescribe to prevent the spread of that disease. We consider such a general prohibition consistent with our mission under the AHPA to prevent the dissemination of diseases of livestock within the United States.

Interstate Movement of Program Animals from a Herd Containing a Reactor or Suspect (§ 76.9)

As we mentioned previously in this document, proposed § 76.9 would provide that, except as provided in proposed § 76.10, which would contain conditions for the interstate movement of reactor, suspect, and exposed program animals, the interstate movement of program animals from a herd containing a reactor or suspect animal for brucellosis or bovine tuberculosis is prohibited, until the disease status of all test-eligible animals in that herd is determined.

If a herd contains a reactor or suspect for brucellosis or bovine tuberculosis, there is a possibility that the herd is affected with that disease. Hence, allowing an animal to move interstate from the herd before the disease status of all animals in the herd is known could contribute to the dissemination of brucellosis or bovine tuberculosis within the United States, and would be inconsistent with our mission under the AHPA.

Interstate Movement of Reactor, Suspect, and Exposed Program Animals (§ 76.10)

This section would state that, notwithstanding the other provisions of part 76, program animals that have been classified as brucellosis or bovine tuberculosis reactors, suspects, or exposed animals could be moved interstate if:

• The animals are officially identified.

• The animals are accompanied by a permit for movement of restricted animals issued by an APHIS or State or Tribal representative.

• The permit for movement of restricted animals clearly specifies the brucellosis or bovine tuberculosis classification of the animals.

• The animals are moved for diagnostic testing, immediate slaughter, necropsy, or other use as approved by the Administrator.

• The animals are moved to a location specified as an approved location for reactor, suspect, or exposed animals. (We would include a footnote, footnote 4, stating that locations include recognized slaughtering establishments, specifically approved stockyards, official testing laboratories, research facilities, and, for exposed animals that have tested negative for brucellosis or bovine tuberculosis, quarantine feedlots and quarantine pens. Additionally, the footnote would provide that a State may request approval of alternate locations by specifying the locations within its animal health plan or proposing to amend the health plan to specify the locations.)

• The animals are moved in a means of conveyance containing only animals not susceptible to brucellosis and/or bovine tuberculosis or animals destined for immediate slaughter or necropsy.

• The means of conveyance in which the animals are moved interstate is secured with official seals applied and removed by an authorized APHIS representative, FSIS inspector, State or Tribal representative, accredited veterinarian, or other individual authorized for this purpose by an APHIS representative; or the animals are accompanied during movement by an APHIS representative, FSIS inspector, State or Tribal representative, or other individual authorized for this purpose by an APHIS representative.

• After shipment, each means of conveyance in which the animals have been transported is cleaned and disinfected by the carrier in accordance with 9 CFR part 71, under the supervision of an APHIS representative, FSIS inspector, State or Tribal representative, accredited veterinarian, or other person designated by the Administrator. (Section 71.7 provides methods for conducting cleaning and disinfection of a means of conveyance, if the means of conveyance is required within 9 CFR to be cleaned and disinfected.)

We consider reactor, suspect, and exposed program animals to potentially be infected with brucellosis or bovine tuberculosis, and thus to pose a risk of transmitting the disease to other program animals. The interstate movement requirements for reactor,

suspect, or exposed animals would be based on this consideration.

Accordingly, we would require the animals to be officially identified in order to ensure that the appropriate animals arrived at their designated destination, and to facilitate traceback and epidemiological investigations in the event that they are determined to be infected. We would require the animals to be accompanied by a permit for movement of restricted animals that specifies the animals' brucellosis or bovine tuberculosis classification so that individuals who ship, handle, transport, or receive the animals would be adequately informed that the animals pose a potential risk of transmitting brucellosis or bovine tuberculosis.

We would require the animals to be moved for diagnostic testing, immediate slaughter, or necropsy, unless the Administrator approves another use, because such uses are terminal. By terminal, we mean that they allow a final determination of the animals' disease status to be made, result in the destruction of the animal, or both.

We do envision that there may be a non-terminal use that the Administrator may approve for exposed dairy heifers in certain instances. If a dairy herd were to become affected with brucellosis or bovine tuberculosis, in order for the dairy to remain operational, it could be necessary to move exposed heifers from that herd interstate to non-terminal locations for care and feeding, and then return them to the affected dairy. However, we also recognize that allowing exposed animals to move to a non-terminal location without adequate restrictions or mitigations could result in the spread of brucellosis or bovine tuberculosis. We therefore request comment regarding whether to allow such movement of dairy heifers, and, if so, under what conditions to allow it.

We would require the animals to be moved to certain approved locations because we believe that any location that receives reactor, suspect, or exposed program animals must have structures and/or procedures in place to address the risk that the animals may pose of transmitting brucellosis or bovine tuberculosis.

We would require the animals to be moved with animals that are not susceptible to brucellosis and/or bovine tuberculosis or animals destined for immediate slaughter or necropsy, because, if a reactor, suspect, or exposed animal is, in fact, infected with brucellosis or bovine tuberculosis, prolonged contact with animals that are susceptible to the disease and are not destined to a terminal location could result in the dissemination of brucellosis or bovine tuberculosis.

We would require the means of conveyance to be sealed, or the animals to be accompanied by an APHIS representative, FSIS inspector, or State or Tribal representative, in order to prevent the diversion of the animals en route to a location that has not been approved by the Administrator, and that may not have appropriate structures and/or procedures to mitigate any risks that the animals may pose of transmitting brucellosis or bovine tuberculosis.

Finally, because surfaces can be contaminated with the bacteria that cause brucellosis and bovine tuberculosis and serve as articles that convey infection, we would require the means of conveyances in which the animals have been transported to be cleaned and disinfected after shipment.

Commuter Herds

Commuter herds are herds of cattle or bison that move interstate during the course of normal livestock operations and without change of ownership between premises that are owned or leased by the same person, as provided in a commuter herd agreement. A commuter herd agreement, in turn, is a written agreement between the owner of such a herd and the animal health officials of the State of origin and destination specifying, at a minimum, the testing, identification, and recordkeeping requirements for the interstate movement of animals in a commuter herd from one premises to another in the course of normal livestock management operations. If a commuter herd is moved interstate under a commuter herd agreement, it is not subject to the requirements of the regulations that would otherwise apply to the interstate movement of cattle and bison from that State. We allow for such an arrangement because we consider commuter herds to present a very low risk of transmitting brucellosis or bovine tuberculosis to other animals, based on the fact that a commuter herd has never tested positive for bovine tuberculosis and only one commuter herd has tested positive for brucellosis.

This arrangement was helpful to owners of commuter herds when many States did not have the highest classifications for brucellosis or bovine tuberculosis within the current State classification systems in parts 77 and 78. However, as more and more States have achieved the highest classifications for brucellosis and bovine tuberculosis, the need for such arrangements has become increasingly unnecessary.

Accordingly, in this proposed rule, we have elected not to include specific provisions for the interstate movement of commuter herds. We believe that the requirements specified in proposed §§ 76.11 through 76.15 (see immediately below) would either be less restrictive or substantially equivalent to the terms and conditions currently specified within commuter herd agreements, and would provide adequate mitigations for the interstate movement of most commuter herds. We also believe that exempting commuter herds from the requirements in proposed §§ 76.8 through 76.10 would potentially allow for the interstate movement of infected animals without appropriate mitigations.

We request public comment regarding whether to include specific conditions for the interstate movement of commuter herds within part 76, and, if so, what those conditions should be.

Interstate Movement Requirements—Cattle and Bison (§§ 76.11 through 76.15)

Interstate Movement of Cattle and Bison Generally Restricted (§ 76.11)

Section 76.11 would provide that, unless cattle or bison belong to one of the categories in §§ 76.8 through 76.10, or the Administrator has provided public notification of alternate conditions for movement of the cattle or bison, cattle or bison could only be moved interstate in accordance with §§ 76.11 through 76.15.

As we mentioned previously in this document in our discussion of proposed § 76.1, the Administrator would rarely specify such alternate conditions, and only when he or she had determined that the regulations in part 76 did not address the risk of transmission of brucellosis or bovine tuberculosis associated with the interstate movement of certain cattle or bison.

Interstate Movement of Cattle and Bison From Consistent States or Tribes for Brucellosis and Bovine Tuberculosis (§ 76.12)

Proposed § 76.12 would contain requirements for the interstate movement of cattle and bison from consistent States or Tribes for brucellosis and bovine tuberculosis. The requirements would cover three types of movements: Movement of rodeo, event, or exhibited cattle or bison; movement of all other cattle or bison from any area of the State or Tribe other than a recognized management area; and movement of all other cattle or bison from a recognized management area.

Proposed paragraph (a) of § 76.12 would contain requirements for the

interstate movement of rodeo, event, or exhibited cattle or bison. We consider such animals to be a distinct risk category because such animals tend to move frequently in interstate commerce and commingle with animals from many different regions, both domestically and internationally. Thus, the risk that rodeo, event, or exhibited cattle or bison that are moved interstate may be exposed to brucellosis or bovine tuberculosis is considerably higher than the risk that cattle or bison that are moved interstate for other purposes may be exposed to these diseases.

We would allow rodeo, event, or exhibited cattle and bison to be moved interstate from a consistent State for brucellosis or bovine tuberculosis provided that:

- The cattle or bison are tested for bovine tuberculosis using an individual official test no more than 60 days prior to initial interstate movement from the premises of origin, with negative results. (We would include a footnote, footnote 5, stating that the requirements of this and the following paragraph apply not only to rodeo, event, or exhibited cattle and bison that have been produced within the United States, but also rodeo, event, or exhibited cattle and bison of foreign origin after they have arrived at their destination within the United States.)
- If the cattle or bison are sexually intact and 6 months of age or older, they are tested for brucellosis using an individual official test no more than 60 days prior to initial interstate movement from the premises of origin, with negative results.
- The cattle or bison are tested for bovine tuberculosis using an individual official test no more than 180 days prior to any subsequent interstate movement, with negative results.
- If the cattle or bison are sexually intact and 6 months of age or older, they are tested for brucellosis using an individual official test no more than 180 days prior to any subsequent interstate movement, with negative results.
- The cattle or bison are accompanied during interstate movement by an ICVI with a statement regarding the date, location, and test results of the official tests for bovine tuberculosis and, if applicable, brucellosis administered prior to initial interstate movement, and the date, location, and test results of the last official test for bovine tuberculosis and, if applicable, brucellosis administered to the animals.
- The cattle or bison are officially identified.

We would require the cattle or bison to be tested for bovine tuberculosis, and, if they are sexually intact and 6 months of age or older, brucellosis prior to initial interstate movement from the premises of origin, with negative results, because, if cattle or bison from that premises become infected with brucellosis or bovine tuberculosis at a rodeo, event, or exhibit, and are moved back to the premises following the rodeo, event, or exhibit, they could infect animals at the premises that have not yet moved interstate. We would require this testing to take place no more than 60 days prior to movement, because 60 days has historically been the maximum amount of time that we consider negative test results for brucellosis or bovine tuberculosis to provide assurances that an animal is not infected at the time it is initially moved interstate.

We would require the cattle or bison to be tested for bovine tuberculosis, and, if they are capable of transmitting the disease, brucellosis, no more than 180 days prior to any subsequent interstate movement, with negative results, because this testing would provide assurances that the cattle or bison have not contracted brucellosis or bovine tuberculosis at a particular rodeo, event, or exhibit. The testing would be at 180-day intervals because rodeo, event, and exhibited cattle are often moved frequently over a 24 to 30-month period, starting with initial movement from their premises of origin. If they were tested more frequently during that time period, there would be a risk of anergy for bovine tuberculosis, that is, erroneous results due to a lack of sensitivity to a test.

We would require the animals to be accompanied by an ICVI with statements regarding the date, location, and test results of the official tests administered prior to initial interstate movement and the last such official tests in order to provide assurances to individuals that handle, ship, or receive the animals that they have been moved in accordance with the regulations. We would require the animals to be officially identified because official identification facilitates traceability of the animals in the event of disease outbreak at a rodeo, event, or exhibit.

Proposed paragraph (b) of § 76.12 would contain conditions for the movement of all other cattle and bison from a consistent State or Tribe. Proposed paragraph (b)(1) would contain conditions for the movement of all other cattle or bison from any area of the State or Tribe other than a recognized management area. Such animals could be moved without restriction under part 76.

Paragraph (b)(1) would contain a footnote, footnote 6, stating that the cattle and bison would still be subject to all other applicable restrictions of 9 CFR chapter 1, including those of §§ 71.3, 71.17, 86.4, and 86.5. Among other prohibitions, § 71.3 generally prohibits the interstate movement of cattle and bison infected with Johne's disease and anthrax, dangerous and communicable diseases of ruminants. Section 71.17 prohibits live cattle or bison from being moved interstate in the same car as dead cattle, bison, poultry, or other animals. Section 86.4 requires most cattle and bison that are moved interstate to be officially identified; § 86.5 requires most cattle and bison that are moved interstate to be accompanied by an ICVI.

Proposed paragraph (b)(2) of § 76.12 would contain conditions for the movement of all other cattle or bison from a recognized management area in a consistent State or Tribe. These cattle or bison would have to be moved in accordance with the conditions for movement of program animals from the recognized management area specified in the State or Tribe's animal health plan.

Interstate Movement of Cattle and Bison From a Provisionally Consistent State or Tribe (§ 76.13)

Section 76.13 would contain conditions for the interstate movement of cattle and bison from a State that is provisionally consistent for brucellosis or bovine tuberculosis.

As we mentioned previously in this document in our discussion of proposed §§ 76.2 and 76.3, whenever we redesignate a consistent State or Tribe as a provisionally consistent State or Tribe, we would publish a notice in the **Federal Register** announcing this redesignation. Proposed paragraph (a) of § 76.13 would provide that, unless this notice specifies restrictions on the interstate movement of cattle and bison arising from this redesignation, cattle or bison that are moved interstate from a provisionally consistent State or Tribe would be subject to the relevant conditions for movement in proposed § 76.12. Thus, the interstate movement of rodeo, event, or exhibited cattle and bison would be subject to the provisions of paragraph (a) of proposed § 76.12; cattle and bison that are not rodeo, event, or exhibited cattle or bison, and that are moved from any area in the State or Tribe other than a recognized management area, would be subject to the provisions of paragraph (b)(1) of that section; and cattle and bison that are not rodeo, event, or exhibited cattle or bison, and that are moved from a recognized management area, would be

subject to the provisions of paragraph (b)(2) of that section.

Proposed paragraph (b) of § 76.13 would provide that, if the notice announcing redesignation of the State or Tribe specifies restrictions on the interstate movement of cattle or bison, and these restrictions differ from the conditions for interstate movement specified in proposed § 76.12, the interstate movement of such cattle or bison would be subject to the restrictions specified in the notice.

Interstate Movement of Cattle and Bison from Inconsistent States or Tribes for Brucellosis (§ 76.14)

This section would contain conditions for the interstate movement of cattle and bison from a State or Tribe that is inconsistent for brucellosis. We would consider all cattle and bison moved interstate from an inconsistent State or Tribe to present at least an unknown risk of disseminating disease. The conditions in proposed § 76.14 would be based on this consideration.

Proposed paragraph (a) of § 76.14 would contain conditions for the interstate movement of sexually intact cattle or bison that are 6 months of age or older, that is, animals for which there is strong scientific evidence supporting their ability to transmit brucellosis.

If the animals are destined for immediate slaughter, they could be moved interstate provided that they are officially identified and accompanied by an ICVI. We do not consider additional mitigations to be necessary because slaughtering an animal at a recognized slaughtering establishment is an effective mitigation to prevent that animal from disseminating brucellosis.

If the animals are not destined for immediate slaughter, they could be moved interstate provided that they meet the following requirements:

- The herd from which the cattle or bison originate has been subjected to a herd test using an official test for brucellosis no more than 1 year and no less than 120 days prior to movement, with negative results.
- The cattle or bison are additionally tested using an individual official test no more than 60 days prior to movement, with negative results.
- Since being individually tested, the cattle or bison have not commingled with non-natural additions to the herd that are of unknown brucellosis status or animals that have had a non-negative test for brucellosis.
- The cattle or bison are officially identified.
- The cattle or bison are accompanied by an ICVI documenting the negative test results.

The initial herd test would provide assurances that the herd from which the animals originate is not affected with brucellosis. The subsequent individual test would provide assurances that the cattle or bison have not become infected with brucellosis since the time of the herd test. Isolation from non-natural additions to the herd that are of unknown brucellosis status or from animals that have had a non-negative test for brucellosis following this individual test would preclude contact with cattle or bison that are potentially infected with brucellosis. Requiring the animals to be officially identified and accompanied by an ICVI with a statement regarding their negative test results would facilitate their traceability, provide assurances to those handling, transporting, or receiving the animals that they do not present a risk of disseminating brucellosis, and help document that the appropriate animals arrived at their designated destination.

Proposed paragraph (b) of § 76.14 would provide conditions for the interstate movement of cattle that are less than 6 months of age, steers, and spayed heifers, that is, animals for which there is no scientific evidence suggesting that they are a source of transmission of brucellosis. Such animals could be moved interstate from an inconsistent State for brucellosis if they are officially identified and accompanied by an ICVI.

Interstate Movement of Cattle and Bison From Inconsistent States or Tribe for Bovine Tuberculosis (§ 76.15)

Section 76.15 would provide conditions for the interstate movement of cattle or bison from a State that is inconsistent for bovine tuberculosis. If the cattle or bison are destined for immediate slaughter, they could be moved interstate provided that they are officially identified and accompanied by an ICVI. We consider slaughtering an animal at a recognized slaughtering establishment to be an effective mitigation to prevent that animal from disseminating bovine tuberculosis.

If the cattle or bison are not destined for immediate slaughter, they could be moved interstate provided that:

- The cattle or bison originate from a herd that was subjected to a herd test using an official test for bovine tuberculosis no more than 1 year and no less than 120 days prior to the movement of the cattle or bison, with negative results.
- The cattle or bison are additionally tested for bovine tuberculosis using an individual official test no more than 60 days prior to movement, with negative results.
- Since being individually tested, the cattle or bison have not commingled with non-natural additions to the herd that are of unknown bovine tuberculosis status or animals that have had a non-negative test for bovine tuberculosis.
- The cattle or bison are officially identified.
- The cattle or bison are accompanied by an ICVI documenting the negative test results.

These conditions, which would be nearly identical to the movement from an inconsistent State for brucellosis of cattle or bison that are capable of transmitting brucellosis, would serve a purpose that is analogous to those conditions. The herd test would provide assurances that the herd from which the cattle or bison originate is not affected with bovine tuberculosis. The subsequent individual test would provide assurances that the cattle or bison have not become infected with bovine tuberculosis since the time of the herd test. Isolation from non-natural additions to the herd that are of unknown bovine tuberculosis status or animals that have had a non-negative test for bovine tuberculosis following this individual test would preclude contact with cattle or bison that are potentially infected with bovine tuberculosis. Finally, requiring the animals to be officially identified and accompanied by an ICVI with a statement regarding their negative test results would facilitate their traceability, provide assurances to those handling, transporting, or receiving the animals that they do not present a risk of disseminating bovine tuberculosis, and help document that the appropriate animals arrived at their designated destination.

Interstate Movement of Captive Cervids (§ 76.16)

Because of routine inspections conducted by FSIS inspectors or State meat inspection personnel at recognized slaughtering establishments, in conjunction with surveillance conducted pursuant to the current prevalence-based State classification systems for brucellosis and bovine tuberculosis, we have confidence in the approximate prevalence levels for brucellosis and bovine tuberculosis in the domestic cattle and bison populations within the United States.

There is, however, no routine slaughter inspection of or surveillance activities for captive cervids. Moreover, many captive cervids that are slaughtered for meat purposes are slaughtered at custom slaughter establishments that are not under Federal or State oversight. Accordingly,

APHIS does not have the same degree of certainty regarding the approximate prevalence levels of brucellosis and bovine tuberculosis in the domestic captive cervid population within the United States.

For this reason, under part 77, we currently require captive cervids that are moved interstate to be tested for bovine tuberculosis, unless the captive cervids originate directly from a herd that has undergone sufficient testing and monitoring to provide assurances that animals from the herd will not transmit bovine tuberculosis.

We currently do not regulate captive cervids for brucellosis. Because captive cervids are not regulated for brucellosis, testing of the animals for brucellosis prior to interstate movement is currently limited. Captive cervids are, however, susceptible to brucellosis, and sexually mature and intact cervids can transmit the disease. Additionally, in recent years, wild elk populations in the GYA have been determined to be infected with brucellosis. For these reasons, we believe it would be prudent to regulate the interstate movement of captive cervids for brucellosis at least until such time as we have greater knowledge of the prevalence for the disease in the domestic captive cervid population within the United States.

Proposed § 76.16 would contain conditions for the interstate movement of captive cervids. The section would generally continue our existing policy of requiring captive cervids to be tested for bovine tuberculosis prior to interstate movement, unless the cervids originate from a herd which has undergone sufficient testing and monitoring to provide assurances that cervids from the herd pose no risk of transmitting bovine tuberculosis. We would, however, also allow captive cervids to be moved interstate without testing for bovine tuberculosis if they are moved for immediate slaughter; this is because, as we mentioned previously in this document, we consider slaughtering an animal at a recognized slaughtering establishment to mitigate the risk that the animal may pose of disseminating bovine tuberculosis.

The section would also require captive cervids to be tested for brucellosis prior to interstate movement, unless we have similar assurances regarding the herd from which the cervids originate, or unless the cervids are moved for immediate slaughter.

The introductory text of the section would state that, except as provided in §§ 76.8 through 76.10, captive cervids could only be moved interstate in accordance with the section.

Proposed paragraph (a) of § 76.16 would provide conditions for the interstate movement of captive cervids that originate directly from herds that are currently accredited for both brucellosis and bovine tuberculosis. Such cervids could be moved interstate if they are officially identified and accompanied by an ICVI with a statement that the cervids originate directly from herds that are currently accredited for both brucellosis and bovine tuberculosis.

Proposed paragraph (b) would provide conditions for the interstate movement of all other cervids. Paragraph (b)(1) would provide conditions for the interstate movement of such cervids, if they are destined for immediate slaughter. Captive cervids that do not originate directly from herds that are currently accredited for brucellosis and bovine tuberculosis and that are destined for immediate slaughter could be moved interstate, provided that the cervids are officially identified and accompanied by an ICVI.

Proposed paragraph (b)(2)(i) of § 76.16 would provide general conditions for the interstate movement of captive cervids that do not originate directly from herds that are currently accredited for brucellosis and bovine tuberculosis and that are not destined for immediate slaughter. The paragraph would require that:

- The cervids originate from a herd that was subject to a herd test using an official test for brucellosis and an official test for bovine tuberculosis no more than 1 year and no less than 120 days prior to movement, with negative results.
- The cervids are additionally tested for brucellosis and bovine tuberculosis using an individual official test no more than 60 days prior to movement, with negative results.
- The cervids are officially identified.
- The cervids are accompanied by an ICVI.

Proposed paragraph (b)(2)(ii) would contain additional conditions for captive cervids moved interstate from an inconsistent State or Tribe for brucellosis and/or bovine tuberculosis. Because we would have significant concerns about an inconsistent State or Tribe's regulatory program for brucellosis and/or bovine tuberculosis, in order for a captive cervids to be moved interstate from the State or Tribe, we would require additional assurances that the cervids have not come in contact with an infected cervid after individual testing. Accordingly, we would require that, since being individually tested, the cervids do not commingle with non-natural additions to the herd that are of unknown disease status or animals that have had a non-negative test for brucellosis or bovine tuberculosis.

Finally, if we finalize this section, there is a possibility that a captive cervid will have non-negative test results to a brucellosis test administered prior to the animal's interstate movement that are such that that we must order its destruction to prevent the possible spread of brucellosis.

In such instances, under section 10407 of the AHPA, we are required to indemnify the owner of the cervid at fair market value minus salvage, with certain, limited exceptions. However, no regulations currently exist in 9 CFR regarding the payment of indemnity for such captive cervids. We therefore request public comment from all interested parties, and, in particular, captive cervid producers, regarding how an equitable appraisal process for the payment of such indemnity may be established.

If we finalize this section, we will add regulations to 9 CFR that take into consideration the comments we receive regarding how best to establish such a process.

Official Tests for Brucellosis and Bovine Tuberculosis, Official Testing Laboratories, and Official Testers (§ 76.17)

Proposed paragraph (a) of § 76.17 would require all testing for the presence or absence of brucellosis and bovine tuberculosis that is conducted in accordance with part 76 to be conducted using an official test. A list of all official tests would be found on the Internet, at *http://www.aphis.usda.gov/animal_health/animal_dis_spec/cattle.*

If this rule is finalized, the list of official tests for brucellosis would, at a minimum, be those that are currently in use within the brucellosis program: The standard card test, the manual complement-fixation test, the Rivanol test, the buffered acidified plate antigen test, the rapid automated presumptive test, the fluorescence polarization assay, the brucellosis ring test, and the heat inactivation ring test. Similarly, the list of official tests for bovine tuberculosis would, at a minimum, be those that are currently in use within the bovine tuberculosis program: The caudal fold test, the bovine interferon gamma assay, the cervical tuberculin test, the comparative cervical tuberculin test, the IDEXX Antibody serological test, the single cervical tuberculin test, and, for elk, red deer, white-tailed deer, fallow deer, and reindeer, the DPP® test.

If we determine that a test can reliably determine the presence or absence of

brucellosis or bovine tuberculosis in animals, we would add it to the list of official tests. Whenever a test is added to the list, we would publish a notice in the **Federal Register** advising the public of this addition.

If we determine at any point that an official test can no longer be considered to provide reliable results regarding the presence or absence of brucellosis or bovine tuberculosis in animals, we would remove it from the list of official tests. Whenever an official test is removed from the list, we would publish a notice in the **Federal Register** alerting the public to and setting forth the reasons for the removal.

Proposed paragraph (b) of § 76.17 would provide the process by which a laboratory could request APHIS recognition as an official testing laboratory, the conditions under which APHIS might withdraw such approval, and the appeal process for any laboratory that has had its approval withdrawn. Paragraph (b)(1) would state that, in order to be considered an official testing laboratory, a Federal, State, or university laboratory, or any other laboratory approved by the National Animal Health Laboratory Network [13], would have to submit a written application to its district APHIS VS office. A standard format for such an application would be found in the Program Standards document.

Proposed paragraph (b)(2) would describe APHIS' evaluation process for applications. First, we would review the submitted application to determine if it is complete. Then, when we determine it is complete, we would conduct formal review and evaluation of the application. Evaluation would be based on the following:

- Whether a need exists at the national level for an additional laboratory to be authorized by APHIS to conduct official tests for brucellosis and bovine tuberculosis. (This is because APHIS must exercise oversight of official testing laboratories, and has limited resources to do so.)
- Whether the laboratory has facilities, safety equipment, and standard microbiological practices appropriate for the testing specified on the application.
- Whether the personnel at the laboratory are qualified to conduct the activities specified on the application, as determined by proficiency testing.
- Whether the individual at the laboratory with oversight of serological testing or final determination of test results has adequate experience in the fields of immunology, microbiology, veterinary medicine, or a similar discipline.

Proposed paragraph (b)(3) of § 76.17 would provide that, following our evaluation, we would communicate our approval or denial of the laboratory's application to the laboratory. If this approval or denial is oral, we would subsequently communicate the approval or denial in writing.

If we approve a laboratory, it would be considered an official testing laboratory. An official testing laboratory could conduct official tests using official testers in the manner set forth in its application and approved by APHIS. A list of all official testing laboratories would be located on the APHIS Web site.

Proposed paragraph (b)(4) of § 76.17 would specify how an official testing laboratory would be required to maintain approval. In order for the laboratory to maintain approval, it would have to demonstrate, by means of annual proficiency testing, that it continually meets or exceeds the standards under which it was approved.

Proposed paragraph (b)(5) of § 76.17 would provide that, if circumstances have changed at the laboratory such that the information supplied on its application for approval is no longer accurate, the laboratory would have to provide updated information to APHIS within 30 days. In response to such notification, we could conduct another evaluation of the facility. Failure by a facility to notify us in a timely manner could result in revocation of its approval.

Proposed paragraph (b)(6) of § 76.17 would provide the conditions under which we may revoke a laboratory's approval as an official testing laboratory. It would state that we could revoke the approval of an official testing laboratory if it is determined to have falsified information on its application or to no longer meet the standards under which it was approved.

Paragraph (b)(6) would also contain the appeal process for any laboratory whose approval is revoked. Any laboratory whose approval is revoked could appeal the decision in writing to the Administrator within 14 days after receiving the written notification of the revocation. The appeal would have to state all of the reasons on which the laboratory relies to show that approval was wrongfully revoked. The Administrator would grant or deny the appeal, in writing, stating the reasons for the decision as soon as circumstances allow.

Proposed paragraph (b)(7) of § 76.17 would contain the process by which a laboratory whose approval has been revoked could seek reapproval. In order to do so, the laboratory would have to submit a written justification for reapproval to APHIS to the address specified within the Program Standards document. The justification would have to demonstrate that the issue that resulted in the revocation has been resolved.

We envision that secondary (corroboratory) testing for brucellosis or bovine tuberculosis that is conducted for purposes of the consolidated brucellosis and bovine tuberculosis program would be conducted at official testing laboratories. However, as they are today, most initial tests for the diseases would be conducted outside of a laboratory environment. Hence, paragraph (c) of § 76.17 would provide the conditions under which we would allow official testers to conduct official tests outside of such an environment. Proposed paragraph (c)(1) would continue our existing policy of allowing regulatory personnel to conduct such tests, at the discretion of a District VS office and a State or Tribal animal health official, and under the conditions specified by the office and the official.

Within the bovine tuberculosis program, we allow veterinarians that are accredited under APHIS' National Veterinary Accreditation Program (NVAP) to conduct caudal fold tests for cattle and bison and the single cervical tuberculin (SCT) test for captive cervids outside of a laboratory environment. In recent years, based on low response rates to caudal fold tests administered by certain of these veterinarians, we have begun to have concerns that those veterinarians may be incorrectly administering the caudal fold test. Because the SCT test is administered and interpreted in a similar manner to the caudal fold test, we also have similar concerns regarding consistent administration of the SCT. Accordingly, we have initiated a process to establish a ''program certification,'' that is, specialized training for accredited veterinarians, within NVAP for the correct administration of official tests for bovine tuberculosis. Proposed paragraph (c)(2) of § 76.17 would allow such certified veterinarians to operate as official testers for bovine tuberculosis outside of a laboratory environment within the State or States in which they are accredited under NVAP. If this proposed rule is finalized and an

[13] The National Animal Health Laboratory Network (NAHLN) is a network of laboratories that is overseen by APHIS and USDA's National Institute of Food and Agriculture and comprises sets of laboratories that focus on different diseases but use common testing methods and software platforms to process diagnostic requests and share information. More information regarding NAHLN may be found at the following Web site: *http://www.aphis.usda.gov/animal_health/nahln/*.

accredited veterinarian did not attain such a program certification, he or she could no longer conduct such tests.

The regulations governing program certifications under NVAP are found in 9 CFR 161.5. That section contains the process for obtaining and maintaining a program certification, but does not contain provisions regarding decertification of a program certification. However, because widespread incorrect administration of official tests for bovine tuberculosis could compromise the integrity of the bovine tuberculosis program, we believe that a qualified accredited veterinarian who consistently administers official tests for bovine tuberculosis in a manner at variance with his or her program certification should be decertified for that program certification and no longer be able to administer such tests for program purposes. We also believe that, in certain instances, deliberate or egregious misapplication of official tests should be considered grounds for suspending or revoking that veterinarian's accreditation. We would amend § 161.5 accordingly.

Miscellaneous Harmonizing Modifications to the Regulations in 9 CFR Chapter I, Subchapter C

As we mentioned at the beginning of this document, the regulations in proposed part 76 would supplant the current regulations governing the bovine tuberculosis program in 9 CFR part 77, and those governing the aspects of the brucellosis program that pertain to cattle and bison, found in 9 CFR part 78, subparts B and C. Therefore, we would remove part 77 from the regulations in its entirety, and would remove subparts B and C from part 78. We would also remove the definitions in part 78 that pertain to terms only found in subpart B or C.

As we mentioned in our discussion of the definition of *depopulate,* the regulations in 9 CFR part 50 contain conditions under which the Administrator may pay indemnity for animals destroyed because of bovine tuberculosis. Similarly, the regulations in 9 CFR part 51 contain conditions under which the Administrator may pay indemnity for animals destroyed because of brucellosis. Since these conditions are often dependent, in part, on the regulations contained in parts 77 and 78, there are, accordingly, a number of references to parts 77 and 78 within parts 50 and 51. For example, in § 51.9, paragraph (b) currently provides that the Administrator will not pay a claim for indemnity for an animal destroyed because of brucellosis, if the existence of brucellosis in the animal was determined based on the results of an official test as defined in § 78.1 and specific instructions for the administration of the test had not previously been issued to the individual performing the test by APHIS and a State animal health official. We would either modify these references to have them refer to part 76, or, if they refer to provisions in parts 77 or 78 for which no analogous provisions exist in part 76, remove the references altogether.

On a related matter, we would also modify a number of definitions in parts 50 and 51 to make them consistent with the definitions in proposed part 76. In part 50, we would amend the definitions of *Administrator, APHIS representative, approved herd plan, destroyed, herd depopulation, State, State animal health official,* and *State representative* for that reason. In part 51, we would amend the definitions of *Administrator, herd depopulation, official seal, State, State animal health official,* and *State representative* for that reason. To explain the definition of *herd depopulation,* we would also add a definition of *herd plan* to the regulations.

Part 71 of 9 CFR contains general requirements regarding the interstate movement of livestock within the United States. Several of these requirements, most notably those governing the approval of livestock facilities to receive animals that move interstate, contain multiple references to parts 77 and 78. We would modify these references to have them refer to part 76, or remove them from part 71. We would also update several of the definitions in part 71 to make them consistent with the definitions in part 76. Specifically, we would update the definitions of *Administrator, APHIS representative, State, State animal health official,* and *State representative* for that reason. (Similarly, we would revise the definition of *interstate commerce* in that part to make it consistent with the definition contained within the AHPA.)

As we mentioned previously in this document, 9 CFR part 86 contains identification and recordkeeping requirements for livestock that move in interstate commerce. Part 86 contains several references to parts 77 and 78 that would become obsolete if this proposed rule is finalized. We would modify these references to refer to part 76.

Finally, in reviewing parts 50 and 51 in developing this proposed rule, we determined that parts 50 and 51 of 9 CFR did not reference a long-standing Agency policy that APHIS does not provide indemnity for cattle, bison, or captive cervids that are publicly owned, that is, owned by the Federal Government, a State or Tribe, or any regional or local community. We would amend parts 50 and 51 to codify this policy.

Part 93 (Imports)

The regulations in 9 CFR part 93, subpart D (§§ 93.400–93.436, referred to below as part 93 or the subpart), contain requirements for the importation of ruminants into the United States to address the risk of introducing or disseminating diseases of livestock within the United States. Part 93 currently contains provisions that address the risk that imported bovines (cattle or bison) may introduce or disseminate brucellosis or bovine tuberculosis within the United States. As we mentioned in the Executive Summary at the beginning of this document, these provisions may be divided into two categories: General requirements for the importation of bovines from most countries, and country-specific requirements for Canada, Mexico, and Ireland.

The general requirements for bovines from most countries are contained in § 93.406. Bovines that are capable of transmitting brucellosis (bovines that are 6 months of age or older and sexually intact) must be tested for brucellosis within 30 days prior to the date of their exportation to the United States, unless the bovines are destined for immediate slaughter or imported from Australia or New Zealand, which we have evaluated and determined to be free of *Brucella abortus.* (We consider the results of this evaluation to still be accurate. We discuss this matter at greater length later in this document, under the section heading titled ''Brucellosis status of foreign regions (§ 93.440)''.)

Additionally, with limited exceptions, bovines that are imported into the United States must originate from a herd that tested negative to a herd test for tuberculosis within 1 year prior to the date of their exportation into the United States and must test negative to an individual test conducted within 60 days of their exportation. (In part 93, bovine tuberculosis is referred to as tuberculosis; accordingly, the remainder of this preamble will use the terms interchangeably.) Sexually intact bovines may be imported into the United States without such testing if they originate from a herd that was certified as an accredited herd within 1 year prior to export.

The regulations that are specific to bovines from Canada are contained in § 93.418. Bovines that are from an affected herd for brucellosis or bovine

tuberculosis may not be imported into the United States. Bovines that are not from an affected herd may be imported into the United States if they are destined for immediate slaughter, or if they are moved to a feedlot and then to slaughter and meet certain conditions that provide assurances that they will not transmit brucellosis or bovine tuberculosis to other animals at those feedlots.

The regulations that are specific to bovines from Mexico are contained in § 93.427. Under these regulations, bovines that are capable of transmitting brucellosis and that are not destined for immediate slaughter or movement directly to a quarantine feedlot must originate from a herd in which all test-eligible animals have been tested for brucellosis no more than 90 and no less than 30 days prior to the exportation of the bovines to the United States, with negative results, and must be subjected to an additional test for brucellosis at the port of entry into the United States, with negative results. Additionally, steers and spayed heifers that are not destined for immediate slaughter must be branded with an ''M'' or ''M_x'' bovine tuberculosis brand, respectively, while sexually intact bovines from Mexico must be detained at the port of entry into the United States and subjected to a test for bovine tuberculosis, with negative results.

The regulations also specify additional requirements for the importation of bovines from a herd in which animals have been determined to be reactors or suspects for brucellosis or reactors for bovine tuberculosis. Finally, based on the historically high prevalence levels of bovine tuberculosis infection in the breeds, the regulations prohibit the importation of Holstein steers and spayed heifers and Holstein cross steers and spayed heifers from Mexico.

The regulations that are specific to Ireland are contained in § 93.432. Under these regulations, bovines that are imported into the United States must originate from a herd that has been subjected to two consecutive annual whole herd tests for brucellosis, with negative results, must be subjected to an additional test for brucellosis no more than 120 and no less than 60 days prior to export, with negative results, and must be subjected to a third test for brucellosis within 30 days prior to export, with negative results.

The general requirements in part 93 predate the establishment of APHIS, and reflect what was considered at the time to be adequate mitigations for the risk of imported bovines introducing or disseminating brucellosis and bovine tuberculosis within the United States. Similarly, the country-specific requirements reflect individual assessments that we conducted at particular points in time of the risk that cattle imported from Canada, Mexico, or Ireland posed at that time of disseminating brucellosis and/or bovine tuberculosis within the United States.

The general requirements were predicated on assumptions at the time that foreign countries had regulatory programs for brucellosis and bovine tuberculosis that were comparable to our own, and the country-specific requirements were predicated on the assumption that all regions within Canada, Mexico, and Ireland have roughly equivalent bovine tuberculosis and brucellosis programs and prevalence rates for brucellosis and/or bovine tuberculosis.

We have discovered, however, that regulatory programs for brucellosis and bovine tuberculosis are not uniform throughout the world. While some of these programs are equivalent to or exceed those within the United States, others lack controls that we consider integral components of any regulatory program for brucellosis or bovine tuberculosis.

Moreover, even within a particular foreign country, we have discovered that regulatory programs for brucellosis and bovine tuberculosis can vary considerably among geopolitical regions, and that, accordingly, prevalence rates for brucellosis or bovine tuberculosis can likewise vary considerably from region to region. For example, in Mexico, herd prevalence rates for bovine tuberculosis vary significantly among exporting regions (States and zones within States), from less than 0.01 percent to as high as 14 percent.

Finally, we have discovered that regulatory programs for brucellosis and bovine tuberculosis in particular regions should not be considered static. Several regions have modified their programs in recent years in order to more aggressively pursue eradication of the diseases in their region, while other regions have had to divert resources once allocated to their regulatory programs to address the introduction or dissemination of other diseases of livestock within the region.

For these reasons, we have evaluated the risk associated with the importation of cattle and bison from foreign regions to determine whether to modify the current regulations, and, if so, how. The risk evaluation, titled ''Bovine Tuberculosis and Brucellosis: Evaluation of Import Risk and Mitigation Strategies,'' [14] finds that the existing requirements, both those that are general and those that are country-specific, sometimes provide insufficient risk mitigation for bovines from higher-prevalence regions and a barrier to trade from low-prevalence regions, and should therefore be modified. The risk evaluation examines two possible modifications: (1) Adopting international standards developed by the OIE or (2) applying the U.S. prevalence-based requirements currently delineated in the Uniform Methods and Rules for the bovine tuberculosis and brucellosis programs within the United States, to the importation of bovines from foreign regions. The risk evaluation recommends the latter approach.

Accordingly, based on the recommendations of the risk evaluation, we would establish a system to classify foreign regions [15] as a particular status level for bovine tuberculosis and a status for brucellosis. The status would be based on our assessment of the regulatory programs for tuberculosis or brucellosis within the region and the prevalence of tuberculosis or brucellosis among bovine herds within the region.

Since regulatory programs and disease status may change, we also would establish provisions for modifying the tuberculosis or brucellosis classification of a foreign region. Regions could request a higher classification for either or both of the diseases, and we would make these requests publicly available for review and comment. Based on the comments received, we would issue a follow-up notice specifying whether we were granting or denying the request for reclassification. Conversely, we would also reserve the right to downgrade a region's status based on emerging evidence.

Finally, we would establish conditions for the importation of cattle and bison from regions with the various classifications that we consider commensurate with the degree of risk of

[14] The evaluation is available on Regulations.gov (see **ADDRESSES** above) or by contacting the persons listed under **FOR FURTHER INFORMATION CONTACT**.

[15] As we mentioned earlier in this document, a region is defined in § 93.400 as ''any defined geographic land area identifiable by geological, political, or surveyed boundaries. A region may consist of any of the following: (1) A national entity (country); (2) a part of a national entity (zone, county, department, municipality, parish, Province, State, etc.); (3) parts of several national entities combined into an area; or (4) a group of national entities (countries) combined into a single area.'' Thus a foreign country could request a classification for a particular province, State, or department within that country, or could request that a zone within a province, State, or department receive a different classification than the rest of the province, State, or department.

dissemination of bovine tuberculosis or brucellosis associated with the importation of cattle and bison imported from such regions.

Tuberculosis Status of Foreign Regions (§ 93.437)

Proposed § 93.437 would contain the classification system for the bovine tuberculosis status of foreign regions. There would be five levels of classification.

Proposed paragraph (a) of § 93.437 would describe the highest classification, Level I. Level I foreign regions would be regions of the world that have a program that meets our requirements for bovine tuberculosis classification, which would be set forth in proposed § 93.438, and a prevalence of bovine tuberculosis in their domestic bovine (cattle and bison) herds of less than 0.001 percent over at least the previous 2 years (24 consecutive months). This prevalence threshold would correspond to our highest State or zone classification level for bovine tuberculosis, accredited-free. However, while we currently require a State or zone to have a zero percent herd prevalence rate for bovine tuberculosis in the State or zone's cattle and bison herds in order to qualify for accredited-free status, we would require foreign regions to have a prevalence of bovine tuberculosis in their domestic bovine herds of less than 0.001 percent over at least the previous 2 years. We are proposing this slightly less stringent standard to reflect the overall prevalence of tuberculosis in the United States.

Proposed paragraph (b) of § 93.437 would describe the next highest classification, Level II. Level II regions would have a program that meets APHIS requirements for tuberculosis classification in accordance with proposed § 93.438, and a prevalence of tuberculosis in their domestic bovine herds equal to or greater than 0.001 percent, but less than 0.01 percent, over the previous 2 years (24 consecutive months). This prevalence threshold would correspond to the second highest State or zone classification, modified accredited advanced, in our current prevalence-based system for the domestic bovine tuberculosis program.

Proposed paragraph (c) of § 93.437 would describe the third classification, Level III. Level III regions would be regions that have a program that meets APHIS' proposed requirements for tuberculosis classification in accordance with § 93.438, and a prevalence of tuberculosis in their domestic bovine herds equal to or greater than 0.01 percent, but less than 0.1 percent, over the previous year (12 consecutive months). This would correspond to the third highest State or zone classification, modified accredited, in our current prevalence-based system for the domestic bovine tuberculosis program.

Proposed paragraph (d) of § 93.437 would describe the fourth classification, Level IV. Level IV regions would be regions that have a program that meets APHIS' requirements for tuberculosis classification in accordance with § 93.438, and a prevalence of tuberculosis in their domestic bovine herds equal to or greater than 0.1 percent, but less than 0.5 percent, over the previous year (12 consecutive months). This would correspond to the fourth highest State or zone classification, accreditation preparatory.

Proposed paragraph (e) of § 93.437 would describe the fifth and final classification, Level V. Level V regions would be regions that do not have a program that meets APHIS' requirements for tuberculosis classification, have a prevalence of tuberculosis in their domestic bovine herds equal to our greater than 0.5 percent, or are unassessed by APHIS with regard to tuberculosis prevalence.

Proposed paragraph (f) of § 93.437 would provide that lists of all Level I regions, Level II regions, Level III regions, Level IV, and Level V regions for tuberculosis are found online, at *http://www.aphis.usda.gov/import_export/animals/live_animals.shtml,* and that changes to the lists would be made in accordance with proposed § 93.438.

Process for Requesting Regional Classification for Tuberculosis (§ 93.438)

Proposed § 93.438 would set forth the process by which a region could request a classification for bovine tuberculosis.

Proposed paragraph (a) of § 93.438 would state that a representative of the competent veterinary authority of any country or countries could request that APHIS classify a region for tuberculosis. Requests for classification or reclassification would have to be submitted to APHIS electronically or through the mail to the address as provided at *http://www.aphis.usda.gov/import_export/animals/live_animals.shtml.* Guidance regarding how to complete a request in a manner that will allow APHIS to review it expeditiously would be available at *http://www.aphis.usda.gov/import_export/animals/reg_request.shtml,* and could also be obtained by contacting APHIS in writing at the address listed in the regulations. At a minimum, in order for APHIS to consider the request complete, it would have to define the boundaries of the region, specify the prevalence level for tuberculosis within the region, and demonstrate the following:

- That there is effective veterinary control and oversight within the region.
- That tuberculosis is a notifiable disease within the region.
- That the region has a program in place for tuberculosis that includes, at a minimum: Epidemiological investigations following the discovery of any infected animals or affected herds, or any animals that have had non-negative test results following a test for tuberculosis, and documentation of these investigations; management of affected herds in a manner designed to eradicate tuberculosis from those herds, and documentation regarding this management; regulatory controls on the movement of livestock into, within, and from the region that correspond to the risk of dissemination of tuberculosis associated with such movement; and access to, oversight of, and quality controls for diagnostic testing for tuberculosis within the region.
- That the region has surveillance in place that is equivalent to or exceeds federal standards for surveillance within the United States.

We recognize that the draft regulatory framework document suggested that we would require regions to submit a request in accordance with § 92.2 in order to be evaluated for bovine tuberculosis status. That section provides eight elements that must make up a region's request for evaluation of its animal health status with regard to certain disease agents.

After deliberation, we decided that directly applying the eight factors described in § 92.2 would not suffice for the evaluation of the tuberculosis or brucellosis status of a foreign region. Although many of the factors are germane, others—such as emergency preparedness and response—are more appropriate for exotic diseases rather than tuberculosis and brucellosis, which are often endemic within regions. More importantly, the eight factors do not fully reflect the specific information we require to evaluate a foreign region's regulatory programs for tuberculosis or brucellosis. We would therefore request that foreign regions provide the above information supporting a request for tuberculosis classification, which incorporates both relevant elements of § 92.2 and critical factors such as information regarding epidemiological investigations, affected herd management, and controls on diagnostic testing within the region. (The format

and content of requests for brucellosis classification, discussed below, would be similar.)

Proposed paragraph (b) of § 93.438 would provide that, if we consider a request complete, we would publish a notice in the **Federal Register** proposing to classify the region according to § 93.437, and making available to the public the information upon which this proposed classification is based. The notice would request public comment.

Proposed paragraph (c)(1) of § 93.438 would provide that, if no comments are received on the notice, or if comments are received but do not affect our proposed classification, we would publish a subsequent notice in the **Federal Register** announcing that classification to be final and adding the region to the appropriate list on the Internet.

Proposed paragraph (c)(2) of § 93.438 would provide that, if comments received on the notice suggest that the region be classified according to a different tuberculosis classification, and we agree with the comments, we would publish a subsequent notice in the **Federal Register** making the information supplied by commenters available to the public, and proposing to classify the region according to this different classification. This notice would also request public comment.

Proposed paragraph (c)(3) of § 93.438 would provide that, if comments received on the notice suggest that insufficient information was supplied on which to base a tuberculosis classification, and we agree with the comments, we would publish a subsequent notice in the **Federal Register** specifying the additional information needed before we could classify the region.

Proposed paragraph (d) of § 93.438 would provide that, if a region is classified under the provisions of the section, that region may be required to submit additional information or allow APHIS to conduct additional information collection activities in order for that region to maintain its classification. It would also provide that, if we determine that a region's classification for tuberculosis is no longer accurate, we would publish a notice in the **Federal Register** announcing the revised classification and setting forth the reasons for this reclassification.

Importation of Ruminants From Certain Regions of the World; Tuberculosis (§ 93.439)

Proposed § 93.439 would contain our revised requirements for the importation of bovines to address the risk that they could present of disseminating tuberculosis within the United States.

Proposed paragraph (a) of § 93.439 would prohibit the importation of ruminants that are known to be infected with or exposed to tuberculosis and ruminants that have had a non-negative response to any test for tuberculosis. Allowing the importation of known or potentially infected ruminants would not be in keeping with our responsibility under the AHPA to prevent the dissemination of bovine tuberculosis within the United States.

Pursuant to this paragraph, we would continue our existing prohibition on the importation of Holstein steers and spayed heifers and Holstein cross steers and spayed heifers from Mexico. Based on information obtained from veterinary authorities within Mexico, it is not uncommon for a significant percentage of the cattle in a herd of Holstein steers and spayed heifers or Holstein cross steers and spayed heifers to be infected with tuberculosis.

Proposed paragraph (b) of § 93.439 would contain conditions for the importation of bovines from Level I regions. Unless specified otherwise by the Administrator, bovines could be imported into the United States from a Level I region for tuberculosis without further restriction under the section.

Paragraph (b) would contain a footnote, footnote 11 within the subpart, stipulating that the importation of the bovines, as well as that of all other bovines covered by the section, would still be subject to all other relevant restrictions of part 93. For example, the importation of the bovines would still be subject to the restrictions of § 93.404, which requires, with limited exceptions, that a permit be issued for the importation of a ruminant before that ruminant is imported into the United States.

Proposed paragraph (c) of § 93.439 would contain conditions for the importation of bovines for immediate slaughter from Level II, III, and IV regions for tuberculosis. Such bovines could be imported into the United States provided that the bovines are officially identified and accompanied by a certificate, issued in accordance with the general requirements for issuance of certificates contained in paragraph (a) of § 93.405, with an additional statement that the bovines are officially identified. In the event that a bovine imported for immediate slaughter is determined to be infected with bovine tuberculosis, official identification would aid us in conducting traceback of the animal and could potentially trigger a review of the exporting region's classification for bovine tuberculosis.

Proposed paragraph (d) of § 93.439 would contain conditions for the importation of bovines for purposes other than immediate slaughter from a Level II region for tuberculosis. Proposed paragraph (d)(1) of § 93.439 would provide conditions for the importation of bovines directly from currently accredited herds for tuberculosis. (As we discuss below, for purposes of part 93, an accredited herd for tuberculosis would be a herd that meets APHIS' standards for accreditation for tuberculosis status, as specified in an import protocol.) Such bovines could be imported into the United States, provided that:

- The bovines are officially identified; and
- The bovines are accompanied by a certificate, issued in accordance with § 93.405, with an additional statement that the bovines are officially identified and originate directly from a currently accredited herd for tuberculosis.

These requirements would be consistent with the conditions for interstate movement of cattle from a currently accredited herd in a modified accredited advanced State or zone that are in the current Uniform Methods and Rules for the domestic bovine tuberculosis program.

Paragraph (d)(2) of § 93.439 would provide conditions for the importation of sexually intact bovines that do not originate directly from a currently accredited herd for bovine tuberculosis. Such bovines could be imported into the United States from a Level II region for tuberculosis for purposes other than immediate slaughter, provided that:

- If the bovines are 6 months of age or older, the bovines are subjected to an individual test for tuberculosis at the port of entry into the United States or during post-arrival quarantine in accordance with § 93.411, with negative results; and
- The bovines are officially identified; and
- The bovines are accompanied by a certificate, issued in accordance with § 93.405, with an additional statement that the animals are officially identified.

These requirements are generally consistent with the current provisions in the Uniform Methods and Rules for the interstate movement of breeding cattle from a modified accredited advanced State or zone. (The risk evaluation explains why we consider sexually intact cattle imported into the United States to be equivalent to breeding cattle produced within the United States.) However, while the Uniform Methods and Rules for the bovine tuberculosis program specifies that individual tuberculosis tests must

take place at the premises of origin prior to interstate movement, we would require them at the port of entry or during post-arrival quarantine for imported sexually intact cattle. This discrepancy is because we need assurances that tuberculosis tests of sexually intact bovines are accurately administered and interpreted; among other reasons, the life spans of sexually intact animals tend to be significantly longer than those of steers and spayed heifers, which affords a significantly longer window of opportunity for infected animals to expose other animals in their herd to the pathogen. Standardized training regarding tuberculosis testing provides such assurances for sexually intact bovines moved interstate within the United States. Testing at the port of entry or during post-arrival quarantine of the bovines would provide such assurances for imported sexually intact bovines.

Finally, we would exempt cattle less than 6 months of age from this testing requirement based on long-standing Agency policy regarding when a bovine from a foreign region becomes test-eligible for tuberculosis.

Proposed paragraph (d)(3) of § 93.439 would contain requirements for the importation of steers and spayed heifers that do not originate directly from a currently accredited herd for bovine tuberculosis. Such bovines could be imported into the United States from a Level II region for tuberculosis for purposes other than immediate slaughter, provided that:

- The steers or spayed heifers are officially identified; and
- The steers or spayed heifers are accompanied by a certificate, issued in accordance with § 93.405, with an additional statement that the bovines are officially identified.

These requirements correspond to the provisions in the Uniform Methods and Rules for the domestic bovine tuberculosis program for interstate movement of steers and spayed heifers from modified accredited advanced States and zones.

Proposed paragraph (e) of § 93.439 would contain conditions for the importation of bovines for purposes other than immediate slaughter from a Level III region for tuberculosis. Proposed paragraph (e)(1) of § 93.439 would provide conditions for the importation of bovines directly from currently accredited herds for tuberculosis. Such bovines could be imported into the United States, provided that:

- The bovines are officially identified; and
- The bovines are accompanied by a certificate, issued in accordance with § 93.405, with an additional statement that the bovines are officially identified and originate directly from a currently accredited herd for tuberculosis.

These requirements would be consistent with the conditions for interstate movement of cattle from a currently accredited herd in a modified accredited State or zone that are in the current Uniform Methods and Rules for the domestic bovine tuberculosis program.

Proposed paragraph (e)(2) of § 93.439 would provide conditions for the importation of sexually intact bovines that do not originate directly from a currently accredited herd for bovine tuberculosis. Such bovines could be imported into the United States from a Level III region for tuberculosis for purposes other than immediate slaughter, provided that:

- The bovines originate from a herd that was subjected to a whole herd test for tuberculosis on its premises of origin no more than 1 year prior to export of the bovines to the United States, with negative results; and
- If the bovines are 2 months of age or older, the bovines are subjected to an additional individual test for tuberculosis on the premises of origin no more than 60 days prior to export of the bovines to the United States, with negative results, except that this test is not required if the bovines are exported within 60 days of the whole herd test and were included in that test; and
- The bovines are officially identified; and
- The bovines are accompanied by a certificate, issued in accordance with § 93.405, with an additional statement that the animals meet the conditions for importation in the section.

These requirements would be consistent with the provisions for interstate movement of breeding cattle and bison from a modified accredited State or zone that are currently in the Uniform Methods and Rules for the domestic bovine tuberculosis program.

Proposed paragraph (e)(3) of § 93.439 would contain requirements for the importation of steers and spayed heifers that do not originate directly from a currently accredited herd for tuberculosis. Such bovines could be imported into the United States from a Level III region for tuberculosis for purposes other than immediate slaughter, provided that:

- If the steers or spayed heifers are 6 months of age or older, the steers or spayed heifers are subjected to an individual test for tuberculosis on the premises of origin no more than 60 days prior to export of the bovines to the United States, with negative results; and
- The steers or spayed heifers are officially identified; and
- The steers or spayed heifers are accompanied by a certificate, issued in accordance with § 93.405, with an additional statement that the animals meet the conditions for importation in paragraph (e)(3) of § 93.439.

These requirements would be consistent with the conditions for interstate movement of steers and spayed heifers from a modified accredited State or zone that are currently in the Uniform Methods and Rules for the domestic bovine tuberculosis program.

Proposed paragraph (f) of § 93.439 would contain conditions for the importation of bovines for purposes other than immediate slaughter from a Level IV region for tuberculosis. Proposed paragraph (f)(1) of § 93.439 would provide conditions for the importation of bovines directly from currently accredited herds for tuberculosis. Such bovines could be imported into the United States, provided that:

- The bovines are subjected to an individual test for tuberculosis at the port of entry into the United States or during post-arrival quarantine in accordance with § 93.411, with negative results; and
- The bovines are officially identified; and
- The bovines are accompanied by a certificate, issued in accordance with § 93.405, with an additional statement that the bovines are officially identified and originate directly from a currently accredited herd for tuberculosis.

These requirements would be generally consistent with the requirements for interstate movement of cattle from a currently accredited herd in an accreditation preparatory State or zone that are currently in the Uniform Methods and Rules. However, while the Uniform Methods and Rules requires an individual tuberculosis test to take place on the premises of origin, we would require it to take place at the port of entry or during post-arrival quarantine. This would be in order to have assurances that the test was reliably administered and interpreted.

Proposed paragraph (f)(2) of § 93.439 would provide conditions for the importation of sexually intact bovines that do not originate directly from a currently accredited herd for bovine tuberculosis. Such bovines could be imported into the United States from a Level IV region for tuberculosis for purposes other than immediate slaughter, provided that:

• The bovines originate from a herd that was subjected to two whole herd tests for tuberculosis on its premises of origin conducted no less than 9 months and no more than 15 months apart, with the second test conducted no less than 60 days prior to the export of the bovines to the United States, with negative results; and

• If the bovines are 2 months of age or older, the bovines are subjected to an additional individual test for tuberculosis at the port of entry into the United State or during post-arrival quarantine in accordance with § 93.411, with negative results; and

• The bovines are officially identified; and

• The bovines are accompanied by a certificate, issued in accordance with § 93.405, with an additional statement that the bovines meet the requirements in this paragraph.

The testing requirements in part 77 for the interstate movement of sexually intact cattle and bison from non-accredited herds in accreditation preparatory States and zones require a herd test followed by two individual tuberculosis tests. However, the Uniform Methods and Rules for the bovine tuberculosis program currently limit the interstate movement of breeding cattle from accreditation preparatory States and zones to cattle that originate directly from currently accredited herds, and the herd testing protocol for accreditation in the Uniform Methods and Rules requires whole herd tests administered at no less than 9 and no more than 15 months apart, with negative test results. The Uniform Methods and Rules also specify that the cattle must be subsequently individually tested for tuberculosis prior to movement, with negative results. These proposed import requirements would be consistent with that testing protocol.

Proposed paragraph (f)(3) of § 93.439 would contain requirements for the importation of steers and spayed heifers that do not originate directly from a currently accredited herd for bovine tuberculosis. Such bovines could be imported into the United States from a Level IV region for tuberculosis for purposes other than immediate slaughter, provided that:

• The bovines originate from a herd that was subjected to a whole herd test for tuberculosis on its premises of origin no more than 1 year prior to the export of the bovines to the United States, with negative results; and

• If the bovines are 2 months of age or older, the bovines are subjected to an additional individual test for tuberculosis on the premises of origin no more than 60 days prior to export of the bovines to the United States, with negative results, except that this additional test is not required if the bovines are exported within 60 days of the whole herd test and were included in that test; and

• The bovines are officially identified; and

• The bovines are accompanied by a certificate, issued in accordance with § 93.405, with an additional statement that the bovines meet the requirements in paragraph (f)(3) of § 93.439.

These proposed requirements would be consistent with the current conditions in the Uniform Methods and Rules for the interstate movement of steers and spayed heifers from an accreditation preparatory State or zone.

Currently, the Uniform Methods and Rules for the bovine tuberculosis program prohibit the movement of cattle from a nonaccredited State or zone to an accredited free State or zone. If we were to apply this principle to the importation of bovines, based on the prevalence of bovine tuberculosis within the United States, the importation of cattle from Level V regions for tuberculosis would be prohibited. However, as the risk evaluation points out, there could be reasons why an importer would want to import cattle from such a region, such as in order to improve the genetic diversity of his or her domestic herd. We are therefore proposing the following requirements for the importation of bovines for any purpose from a Level V region for tuberculosis; these requirements would be contained in paragraph (g) of § 93.439:

• APHIS and the importer have entered into a Cooperative and Trust Fund Agreement, and the importer has deposited funds with APHIS in an amount determined by APHIS to cover all costs incurred by APHIS in providing services in accordance with the Cooperative and Trust Fund Agreement; and

• The bovines originate from a herd that was subjected to two whole herd tests for tuberculosis on its premises of origin and conducted no less than 9 months and no more than 15 months apart, with at least the second whole herd test administered by an APHIS veterinarian and conducted no less than 60 days prior to export, with negative results; and

• The bovines are subjected to an additional individual test for tuberculosis at the port of entry into the United States or during post-arrival quarantine in accordance with § 93.411, with negative results; and

• The bovines are officially identified; and

• The bovines are accompanied by a certificate, issued in accordance with § 93.405, with an additional statement that the bovines meet the requirements in paragraphs (g)(1), (g)(2), and (g)(4) of § 93.439.

We would require at least one of the whole herd tests to be administered by an APHIS veterinarian because foreign regions with a Level V classification for tuberculosis may either not have a control program for bovine tuberculosis, may have a control program for tuberculosis that APHIS has determined not to be equivalent to that within the United States, or may have a bovine tuberculosis prevalence rate that is an order of magnitude higher than that of the United States.

Brucellosis Status of Foreign Regions (§ 93.440)

Proposed § 93.440 would contain our classification system for the brucellosis status of foreign regions. There would be the three levels of classification.

Proposed paragraph (a) of § 93.440 would describe the higher classification, Level I. A Level I region for brucellosis would be a region that has a program that meets APHIS requirements for brucellosis classification in accordance with proposed § 93.441, and a prevalence of brucellosis in their domestic bovine herds of less than 0.001 percent over at least the previous two years (24 consecutive months). This prevalence threshold would correspond to the highest State classification level for brucellosis in the Uniform Methods and rules for that program, Class Free, which requires a zero prevalence rate for brucellosis within a State. However, as we do not believe that we can hold foreign regions to a standard for bovine tuberculosis prevalence that is more stringent than the actual prevalence of bovine tuberculosis within the United States, so we similarly believe that we cannot hold foreign regions to a higher standard for brucellosis than the actual prevalence of brucellosis within the United States.

Proposed paragraph (b) of § 93.440 would describe the second classification, Level II. A Level II region for brucellosis would be a region that has a program that meets APHIS requirements for brucellosis classification in accordance with § 93.441, and that has a prevalence of brucellosis in their domestic bovine herds equal to or greater than 0.001 percent, but less than 0.01 percent, over the previous 2 years. This corresponds to the second highest State classification for brucellosis in the Uniform Methods

and Rules for the domestic brucellosis program, Class A.

Proposed paragraph (c) of § 93.440 would describe the third classification, Level III. A Level III region would be a region that has a program that does not meet APHIS requirements for brucellosis classification in accordance with § 93.441, that has a herd prevalence equal to or greater than .01 percent, or that is unassessed by APHIS with regard to brucellosis prevalence. This would correspond to the third and lowest State classification for brucellosis in the Uniform Methods and Rules for the domestic brucellosis program, Class B.

Proposed paragraph (d) of § 93.440 would state that lists of all Level I, Level II, and Level III regions for brucellosis are found online, at *http://www.aphis.usda.gov/import_export/animals/live_animals.shtml.* It would further state that changes to the lists would be made in accordance with proposed § 93.441.

As we mentioned previously in this document, the general requirements for importation of bovines to address the risk of introducing and disseminating brucellosis within the United States currently exempt Australia and New Zealand from having to follow the requirements; this is because we have evaluated both Australia and New Zealand and determined them to be free of *Brucella abortus.* For that reason, if this rule is finalized, both Australia and New Zealand would be categorized as Level I regions for brucellosis.

Process for Requesting Regional Classification for Brucellosis (§ 93.441)

Proposed § 93.441 would set forth the process by which a region could request a classification for brucellosis. This process would be very similar to the process described in proposed § 93.438 for requesting a classification for bovine tuberculosis.

Proposed paragraph (a) of § 93.441 would state that a representative of the competent veterinary authority of any country or countries could request that APHIS classify for brucellosis. Requests for classification would have to be submitted to APHIS electronically or through the mail as provided at *http://www.aphis.usda.gov/import_export/animals/live_animals.shtml.* Guidance regarding how to complete a request in a manner that will allow APHIS to review it expeditiously would be available at *http://www.aphis.usda.gov/import_export/animals/reg_request.shtml,* and could also be obtained by contacting APHIS in writing at the address listed in the regulations. At a minimum, in order for APHIS to consider the request complete, it would have to define the boundaries of the region, specify the prevalence level for brucellosis within the region, and demonstrate the following:

- That there is effective veterinary control and oversight within the region.
- That brucellosis is a notifiable disease within the region.
- That the region has a program for brucellosis in place that includes, at a minimum: Epidemiological investigations following the discovery of any infected animals or affected herds, or any animals or herds that have had non-negative test results following a test for brucellosis, and documentation of these investigations; management of affected herds in a manner designed to eradicate brucellosis from those herds, and documentation regarding this management; regulatory controls on the movement of livestock into, within, and from the region that correspond to the risk of dissemination of brucellosis associated with such movement; and access to, oversight of, and quality controls on diagnostic testing for brucellosis within the region.
- That the region has surveillance in place that is equivalent to or exceeds Federal standards for brucellosis surveillance within the United States.
- That, if the region vaccinates for brucellosis, it is in a manner that has been approved by APHIS.

Like the proposed information requirements for a regional classification for tuberculosis, these requirements would be aimed at obtaining specific information from a foreign region sufficient to evaluate the regulatory program for brucellosis within the region.

Proposed paragraph (b) of § 93.441 would provide that, if we consider the request complete, APHIS would publish a notice in the **Federal Register** proposing to classify the region for brucellosis, and making available to the public the information upon which this proposed classification is based. The notice would request public comment.

Proposed paragraph (c) of § 93.441 would set out our process for notifying the public of our determination. If no comments are received on the initial notice, or if comments are received but do not affect our proposed classification, we would publish a subsequent notice in the **Federal Register** announcing the classification to be final and adding the region to the list of such regions on the Internet.

If comments received on the initial notice suggest that the region be classified according to a different brucellosis classification, and we agree with the comments, we would publish a subsequent notice in the **Federal Register** making the information supplied by the commenters available to the public, and proposing to classify the region according to this different classification. This notice would also request public comment.

Finally, if comments received on the notice suggest that insufficient information was supplied on which to base brucellosis classification, and we agree with the comments, we would publish a subsequent notice in the **Federal Register** specifying the additional information needed before we could classify the region.

Proposed paragraph (d) would provide that, if a region is classified under the provisions of the section, that region may be required to submit additional information or allow APHIS to conduct additional information collection activities in order for that region to maintain its classification. It would also provide that if APHIS determines that a region's classification for brucellosis is no longer accurate, we will publish a notice in the **Federal Register** announcing that revised classification, as well as the reasons for it.

Importation of Ruminants From Certain Regions of the World; Brucellosis (§ 93.442)

Proposed § 93.442 would contain our revised requirements for the importation of bovines to address the risk that they could present of disseminating brucellosis within the United States.

Proposed paragraph (a) of § 93.442 would prohibit the importation of ruminants that are known to be infected with or exposed to brucellosis and ruminants that have had a non-negative response to any test for *Brucella* spp. Allowing the importation of known or potentially infected ruminants would not be in keeping with our responsibility under the AHPA to prevent the dissemination of brucellosis within the United States.

Proposed paragraph (b) of § 93.442 would provide that, unless specified otherwise by the Administrator, bovines could be imported into the United States from a Level I region for brucellosis without further restriction under the section. Paragraph (b) would contain a footnote, footnote 12 within the subpart, stipulating that the importation of such bovines would still be subject to all other relevant restrictions within 9 CFR.

Proposed paragraph (c) of § 93.442 would contain conditions for the importation of bovines for immediate slaughter from Level II or Level III regions. Such bovines could be

imported into the United States, provided that they are officially identified and accompanied by a certificate, issued in accordance with § 93.405(a), with an additional statement that the bovines are officially identified.

Proposed paragraph (d) of § 93.442 would contain conditions for the importation of sexually intact bovines from a Level II region for brucellosis for purposes other than immediate slaughter. Proposed paragraph (d)(1) of § 93.442 would contain conditions for the importation of bovines that originate directly from currently accredited herds for brucellosis. Such bovines could be imported into the United States from a Level II region for brucellosis, provided that:

- The bovines are officially identified; and
- The bovines are accompanied by a certificate, in accordance with § 93.405, with an additional statement that the bovines are officially identified and originate directly from a currently accredited herd for brucellosis.

These requirements would consistent with the conditions for the interstate movement of cattle directly from currently certified brucellosis-free herds in Class A States that are contained in the current Uniform Methods and Rules for the domestic brucellosis program.

Proposed paragraph (d)(2) of § 93.442 would contain conditions for the importation of sexually intact bovines that do not originate directly from a currently accredited herd for brucellosis. Such bovines could be imported into the United States from a Level II region for brucellosis for purposes other than immediate slaughter, provided that:

- The bovines originate from a herd that was subjected to a whole herd test for brucellosis on its premises of origin no more than 90 days and no less than 30 days prior to the export of the bovines to the United States, with negative results; and
- If the bovines are 6 months of age or older, the bovines are subjected to an additional individual test for brucellosis at the port of entry into the United States or during post-arrival quarantine in accordance with § 93.411, with negative results; and
- The bovines are officially identified; and
- The bovines are accompanied by a certificate, issued in accordance with § 93.406, with an additional statement that the bovines meet the relevant requirements in the paragraph.

These requirements would be consistent with the conditions for the importation of breeding bovines from Mexico that are currently contained in part 93. We have evaluated those requirements and determined that they are appropriate mitigations, provided that a foreign region has a brucellosis prevalence of less than 0.01 percent.

Proposed paragraph (d)(3) of § 93.442 would contain provisions for the importation of steers and spayed heifers from Level II regions for brucellosis. Steers and spayed heifers could be imported to the United States from such regions, provided that:

- The steers or spayed heifers are officially identified; and
- The steers or spayed heifers are accompanied by a certificate, issued in accordance with § 93.405, with an additional statement that the steers or spayed heifers are officially identified.

We would not require the steers or spayed heifers to be tested for brucellosis because there is no evidence that steers or spayed heifers can transmit brucellosis. However, we would require them to be identified. In the event that a shipment of bovines destined to the United States is determined to contain infected animals, knowing the origin of each of the bovines in that shipment would facilitate a timely epidemiological investigation.

Proposed paragraph (e) of § 93.442 would contain conditions for the importation of cattle from Level III regions for brucellosis. Paragraph (e)(1) § 93.442 would contain standards for the importation of bovines directly from currently accredited herds for brucellosis in a Level III region for brucellosis:

- If sexually intact, the bovines are subjected to an individual test for brucellosis at the port of entry into the United States or during post-arrival quarantine in accordance with § 93.411, with negative results; and
- The bovines are officially identified; and
- The bovines are accompanied by a certificate, issued in accordance with § 93.405, with an additional statement that the bovines are officially identified and originate directly from a currently accredited herd for brucellosis.

It is important to note that these cattle would have to come from herds that are accredited according to our standards for accreditation, as these are specified in an import protocol with the foreign region. In order for us to enter into such an import protocol with a Level III region for brucellosis, we would have to evaluate their veterinary infrastructure and determine it to be sufficient to have assurances that it can implement the standards that would be specified in the protocol document. It is therefore possible that the conditions in this paragraph will not be applicable for certain Level III regions for brucellosis.

Proposed paragraph (e)(2) of § 93.442 would contain conditions for the importation of sexually intact bovines from a Level III region for brucellosis for purposes other than immediate slaughter. Such bovines could be imported into the United States, provided that:

- The bovines originate from a herd that was subjected to two whole herd tests for brucellosis on its premises of origin, with the second test taking place no more than 90 days and no less than 30 days prior to the export of the bovines to the United States, with negative results each time; and
- If the bovines are 6 months of age or older, the bovines are subjected to an additional individual test for brucellosis at the port of entry into the United States or during post-arrival quarantine in accordance with § 93.411; and
- The bovines are officially identified; and
- The bovines are accompanied by a certificate, issued in accordance with § 93.405, with an additional statement that the bovines meet the relevant requirements of the paragraph.

These requirements would be consistent with the conditions for the movement of breeding cattle from Class B States that are specified in the current Uniform Methods and Rules for the domestic brucellosis program.

Proposed paragraph (e)(3) of § 93.442 would set forth conditions for the importation of steers and spayed heifers from a Level III region for purposes other than immediate slaughter. Because there is no scientific evidence suggesting that they are a source of transmission of brucellosis, steers or spayed heifers would not have to be tested for the disease in order to be imported into the United States. They would, however, need to be officially identified and accompanied by a certificate, issued in accordance with § 93.405(a), with an additional statement that they are officially identified.

Existing General Requirements

We would remove paragraphs (a), (c), and (d) of § 93.406, which contain the existing brucellosis and bovine tuberculosis testing requirements for bovines imported from all countries other than Canada, Mexico, and Ireland.

Existing Country-Specific Requirements

As we mentioned previously in this document, the regulations in part 93 that address the risk that bovines from Canada may present of disseminating

bovine tuberculosis or brucellosis within the United States are contained in § 93.418. We are proposing to remove paragraphs (b) and (c) of § 93.418, which contain the tuberculosis and brucellosis testing or certification requirements for such bovines.

As we also mentioned previously in this document, § 93.427 contains regulations that address the risk that bovines from Mexico may present of disseminating bovine tuberculosis or brucellosis within the United States. We would remove paragraphs (c) and (d) of § 93.427, which contain the bovine tuberculosis- and brucellosis-specific requirements for the importation of cattle from Mexico.

We would, however, retain one of the existing provisions in paragraph (c)(1) of that section, which requires steers and spayed heifers that are not destined for immediate slaughter to be branded with an ''M'' or ''M_x'' bovine tuberculosis brand, by incorporating this provision into the general requirements for the importation of bovines from Mexico in paragraph (a) of the section. We are retaining this branding requirement because steers and spayed heifers from Mexico constitute a large portion of the total cattle imported into the United States, because tracing such animals using solely their official identification is commensurately harder, and because we believe it is therefore necessary to have additional identification of such animals regarding their country of origin in the unlikely event that steers or spayed heifers of Mexican origin that have been imported into the United States are determined to be infected with bovine tuberculosis.

Section 93.424 requires an import permit to be issued for most ruminants that are imported into the United States from Mexico. Paragraph (b) of § 93.424 requires, for most cattle imported from Mexico, an official record of brucellosis testing conducted pursuant to § 93.427 to be presented at inspection at the port of entry. We are amending paragraph (b) to reflect the fact that § 93.427 no longer has such testing requirements.

Section 93.429 contains conditions for the importation of ruminants from Mexico for immediate slaughter. Since cattle imported from Mexico for immediate slaughter would now be subject to the relevant importation requirements in §§ 93.439 and 93.442, we are removing references to cattle from § 93.429.

As we mentioned previously in this document, § 93.432 contains conditions for the importation of cattle from Ireland. We are removing this section in its entirety.

We are not proposing at this time to assign a tuberculosis or brucellosis classification to Canada, Mexico, or Ireland, or any portion of those countries. Rather, if this proposed rule is finalized, we would stagger the effective dates of various sections. Sections 93.438 and 93.441, which contain the process by which to request a regional classification for brucellosis or bovine tuberculosis, and §§ 93.437 and 93.442, which contain the classification systems themselves, would be effective before the importation requirements for bovines from regions with those classifications or the removal of the existing country-specific import requirements. Before the new importation requirements go into effect, we would evaluate the information that we currently have regarding Mexico, Canada, and Ireland, then gather any additional information that we would need in order to propose tuberculosis or brucellosis statuses for these countries, or portions thereof.

Definitions

Section 93.400 contains definitions of terms used with the following sections of subpart D of part 93. We would amend this section by adding several definitions, removing several definitions, and modifying one definition.

We would add definitions of the following terms: *Accredited herd for brucellosis, accredited herd for tuberculosis, import protocol, individual test, non-negative test results, notifiable disease, spayed heifer, steer, tuberculosis, whole herd test for brucellosis,* and *whole herd test for tuberculosis.*

We would define *import protocol* as a document issued by APHIS and provided to officials of the competent veterinary authority of an exporting region that specifies in detail the mitigation measures that will comply with APHIS' regulations regarding the import of certain animals or commodities. We have long used such import protocols to assist exporting countries in complying with our regulations; in this manner import protocols serve an analogous function for exporting countries that the Program Standards document would serve for States and Tribes.

On a related matter, we would define an *accredited herd for tuberculosis* as a herd that meets APHIS' standards for accreditation for tuberculosis status, and *accredited herd for brucellosis* as a herd that meets APHIS' standards for accreditation for brucellosis status. Both definitions would specify that standards for accreditation are specified in import protocols.

We would define *brucellosis* as infection with or disease caused by *Brucella abortus.*

We would define *individual test* as a test for brucellosis or tuberculosis that is approved by the Administrator and that is administered individually in accordance with part 93 to ruminants that are susceptible to brucellosis or tuberculosis. The definition would specify that, for purposes of part 93, testing of individual animals as part of a whole herd test does not constitute an individual test.

We would define *non-negative test results* as any test results for tuberculosis or brucellosis within the suspect or positive range parameters of a pathogen assay that has been approved by the Administrator.

We would define *notifiable disease* as a disease for which confirmed or suspected occurrences within a region must be reported to the competent veterinary authority or other competent authority of that region. This would be consistent with the meaning of the term *notifiable disease* as it is used within various OIE standards.

We would define *spayed heifer* as a female bovine that has been neutered in a manner approved by the Administrator and specified in an import protocol. The definition would require the female bovine to be neutered in a specific manner because, on occasion, bovines that have been imported into the United States under the conditions reserved for spayed heifers have given birth.

We would define *steer* as a sexually neutered male bovine.

We would define *tuberculosis* as infection with or disease caused by *Mycobacterium bovis.*

We would define *whole herd test for brucellosis* as a brucellosis test that has been approved by APHIS of all bovines in a herd of origin that are 6 months of age or older, and of all bovines in the herd of origin that are less than 6 months of age and were not born into the herd of origin, except those bovines that are less than 6 months of age and originate directly from a currently accredited herd for brucellosis.

Likewise, *whole herd test for tuberculosis* would mean a tuberculosis test that has been approved by APHIS of all bovines in a herd of origin that are 6 months of age or older, and of all bovines in the herd of origin that are less than 6 months of age and were not born into the herd of origin, except those bovines that are less than 6 months of age and originate directly

from a currently accredited herd for tuberculosis.

The scope of these definitions would be generally consistent with the definition of *test-eligible animal* within proposed part 76. However, we would set the minimum age for whole herd testing for tuberculosis at 6 months, rather than 12, as it would be in part 76, because this reflects long-standing agency policy regarding the minimum testing age for tuberculosis for foreign regions with prevalence levels that are greater than our own.

We would remove the definitions of *brucellosis certified-free province or territory of Canada, official tuberculin test, tuberculosis-free herd,* and *whole herd test.* These definitions would either no longer be found in part 93, or would be superseded by the definitions that we are proposing to add.

Finally, the definition of *herd of origin* in § 93.400 currently is written in a manner that conflates two distinct understandings of that term: The herd in which an animal was born, and any herd in which the animal was continually maintained for at least 4 months. Both of these understandings are correct, therefore we would retain them within the definition. We would, however, modify the definition to make it clearer that there are two distinct understandings of the term.

Miscellaneous Provisions

Section 93.401 contains general prohibitions regarding the importation of ruminants. We have long required that a means of conveyance be cleaned and disinfected prior to use to transport a ruminant for importation; if it is not, we consider the means of conveyance to present an unknown risk of harboring diseases of ruminants, and prohibit the entry of animals into the United States in that means of conveyance. However, § 93.401 does not currently contain that prohibition. We would amend the section to add it.

Section 93.423 contains conditions for the importation of ruminants from Central America and the West Indies. As written, the section could be construed to exempt ruminants from those regions from the requirements in proposed §§ 93.439 and 93.442. We would amend § 93.423 accordingly.

Finally, in reviewing part 93 during the preparation of this proposed rule, we noted an erroneous citation in § 93.408. We would remove the citation.

Executive Orders 12866 and 13563 and Regulatory Flexibility Act

This proposed rule has been determined to be significant for the purposes of Executive Order 12866 and, therefore, has been reviewed by the Office of Management and Budget.

We have prepared an economic analysis for this rule. The economic analysis provides a cost-benefit analysis, as required by Executive Orders 12866 and 13563, which direct agencies to assess all costs and benefits of available regulatory alternatives and, if regulation is necessary, to select regulatory approaches that maximize net benefits (including potential economic, environmental, public health and safety effects, and equity). Executive Order 13563 emphasizes the importance of quantifying both costs and benefits, of reducing costs, of harmonizing rules, and of promoting flexibility. The economic analysis also provides an initial regulatory flexibility analysis that examines the potential economic effects of this rule on small entities, as required by the Regulatory Flexibility Act. The economic analysis is summarized below. Copies of the full analysis are available on the Regulations.gov Web site (see **ADDRESSES** above for instructions for accessing Regulations.gov) or by contacting the person listed under **FOR FURTHER INFORMATION CONTACT**.

Bovine tuberculosis and brucellosis are contagious diseases affecting cattle as well as other livestock species. Cooperative State-Federal-Industry programs to eliminate bovine tuberculosis and brucellosis have been administered by APHIS, State animal health agencies, and U.S. livestock producers. The United States has made great strides in recent years toward eradication of brucellosis and bovine tuberculosis. As a result, occurrences of these diseases within the United States have become increasingly rare.

However, in recent years, several factors have arisen that make changes to the programs necessary. These factors include the identification of reservoirs of brucellosis and bovine tuberculosis in wildlife populations in certain areas of the country, significant changes to the cattle industry within the United States, and the establishment of bison and captive cervid industries.

This rule would consolidate the regulations governing bovine tuberculosis, and those governing brucellosis. Under these changes, States and/or Tribes would implement animal health plans that identify sources of the diseases within the State or Tribe and specify mitigations to address the risk posed by these sources. The consolidated regulations would also set forth standards for surveillance, epidemiological investigations, and affected herd management that must be incorporated into each animal health plan, with certain limited exceptions; would provide revised conditions for the interstate movement of cattle, bison, and captive cervids; and would provide revised conditions for APHIS approval of tests, testing laboratories, and testers for bovine tuberculosis and/or brucellosis. Finally, the proposal would also revise the import requirements for cattle and bison that pertain to the risk the cattle or bison may present of transmitting bovine tuberculosis or brucellosis, to make these conditions clearer and assure that they more effectively mitigate the risk of introduction of the diseases into the United States.

Economic effects of the proposed rule are not expected to be significant. Bovine tuberculosis affects less than 0.001 percent of domestic program herds, and brucellosis also less than 0.001 percent. There would be few on-the-ground operational changes for States or producers. Most reporting requirements in areas where bovine tuberculosis and brucellosis are not found, as well as surveillance, movement limitations, testing, and reporting in areas where either disease is present, would continue with little alteration. Additionally, we do not expect requirements for the importation of cattle and bison from foreign regions to change significantly as a direct result of this proposed rule, and where they do change they will affect very few producers or importers.

Specific costs associated with this rule are discussed in the Executive Summary at the beginning of this document, under the heading ''Costs and Benefits.''

We expect that the economic effects of this rule on foreign producers of cattle and bison would be minimal. With regard to domestic production, we expect that the benefits would justify the costs. While direct effects of this proposed rule for producers should be small, whether the entity affected is small or large, consolidation of the brucellosis and bovine tuberculosis regulations would benefit the affected livestock industries. The use of animal health plans would require States to identify and monitor potential sources of disease transmission in their State, leading to more focused, flexible and responsive disease management and reducing the number of producers that incur costs when disease concerns arise in an area. Under these circumstances, the APHIS Administrator has determined that this proposed rule, if promulgated, will not have a significant economic impact on a substantial number of small entities.

Executive Order 12988

The provisions of this proposed rule concerning the importation of ruminants have been reviewed under Executive Order 12988, Civil Justice Reform. If this proposed rule is adopted: (1) All State and local laws and regulations that are inconsistent with those provisions will be preempted; (2) no retroactive effect will be given to the provisions; and (3) administrative proceedings will not be required before parties may file suit in court challenging the provisions.

Paperwork Reduction Act

In accordance with section 3507(d) of the Paperwork Reduction Act of 1995 (44 U.S.C. 3501 *et seq.*), the information collection or recordkeeping requirements included in this proposed rule have been submitted for approval to the Office of Management and Budget (OMB). Please send written comments to the Office of Information and Regulatory Affairs, OMB, Attention: Desk Officer for APHIS, Washington, DC 20503. Please state that your comments refer to Docket No. APHIS–2011–0044. Please send a copy of your comments to: (1) Docket No. APHIS–2011–0044, Regulatory Analysis and Development, PPD, APHIS, Station 3A–03.8, 4700 River Road Unit 118, Riverdale, MD 20737–1238, and (2) Clearance Officer, OCIO, USDA, Room 404–W, 14th Street and Independence Avenue SW., Washington, DC 20250. A comment to OMB is best assured of having its full effect if OMB receives it within 30 days of publication of this proposed rule.

This rule would require States, and if they so choose, Tribes, to submit animal health plans to APHIS that identify sources of the diseases within the State or Tribal lands and specify mitigations to address the risk posed by these sources. It would also require States to submit certain reports.

In certain instances, foreign governments could have to enter into trust fund agreements with APHIS so that cattle may be exported to the United States from their region as a result of this rule.

Additionally, there may be instances in which producers would request alternate affected herd management protocols from those specified within the rule.

We are soliciting comments from the public (as well as affected agencies) concerning our proposed information collection and recordkeeping requirements. These comments will help us:

(1) Evaluate whether the proposed information collection is necessary for the proper performance of our agency's functions, including whether the information will have practical utility;

(2) Evaluate the accuracy of our estimate of the burden of the proposed information collection, including the validity of the methodology and assumptions used;

(3) Enhance the quality, utility, and clarity of the information to be collected; and

(4) Minimize the burden of the information collection on those who are to respond (such as through the use of appropriate automated, electronic, mechanical, or other technological collection techniques or other forms of information technology; *e.g.,* permitting electronic submission of responses).

Estimate of burden: Public reporting burden for this collection of information is estimated to average 163.45 hours per response.

Respondents: States, Tribes, foreign governments, producers of cattle, bison, and captive cervids.

Estimated annual number of respondents: 68.

Estimated annual number of responses per respondent: 3.514.

Estimated annual number of responses: 239.

Estimated total annual burden on respondents: 39,063 hours. (Due to averaging, the total annual burden hours may not equal the product of the annual number of responses multiplied by the reporting burden per response.)

Copies of this information collection can be obtained from Ms. Kimberly Hardy, APHIS' Information Collection Coordinator, at (301) 851–2727.

E-Government Act Compliance

The Animal and Plant Health Inspection Service is committed to compliance with the EGovernment Act to promote the use of the Internet and other information technologies, to provide increased opportunities for citizen access to Government information and services, and for other purposes. For information pertinent to E-Government Act compliance related to this proposed rule, please contact Ms. Kimberly Hardy, APHIS' Information Collection Coordinator, at (301) 851–2727.

List of Subjects

9 CFR Part 50

Animal diseases, Bison, Cattle, Hogs, Indemnity payments, Reporting and recordkeeping requirements, Tuberculosis.

9 CFR Part 51

Animal diseases, Cattle, Hogs, Indemnity payments, Reporting and recordkeeping requirements.

9 CFR Part 71

Animal diseases, Cattle, Quarantine, Transportation.

9 CFR Part 76

Bison, Bovine tuberculosis, Brucellosis, Captive cervids, Cattle, Quarantine, Reporting and recordkeeping requirements, Transportation.

9 CFR Part 77

Animal diseases, Bison, Cattle, Reporting and recordkeeping requirements, Transportation, Tuberculosis.

9 CFR Part 78

Animal diseases, Bison, Cattle, Hogs, Quarantine, Reporting and recordkeeping requirements, Transportation.

9 CFR Part 86

Animal diseases, Bison, Cattle, Interstate movement, Livestock, Official identification, Reporting and recordkeeping requirements, Traceability.

9 CFR Part 93

Animal diseases, Imports, Livestock, Poultry and poultry products, Quarantine, Reporting and recordkeeping requirements.

9 CFR Part 161

Reporting and recordkeeping requirements, Veterinarians.

Accordingly, under the authority of 7 U.S.C. 8301 *et seq.,* we propose to amend 9 CFR chapter I as follows:

PART 50—ANIMALS DESTROYED BECAUSE OF TUBERCULOSIS

■ 1. The authority citation for part 50 continues to read as follows:

Authority: 7 U.S.C. 8301–8317; 7 CFR 2.22, 2.80, and 371.4.

■ 2. Section 50.1 is amended as follows:
■ a. By revising the definitions for *Administrator, APHIS representative, approved herd plan, destroyed,* and *herd depopulation.*
■ b. By adding, in alphabetical order, a definition for *publicly owned.*
■ c. By revising the definitions for *quarantined feedlot, reactor cattle, bison, and captive cervids, State, State animal health official,* and *State representative.*

The addition and revisions read as follows:

§ 50.1 Definitions.

* * * * *

Administrator. The Administrator, Animal and Plant Health Inspection Service, or any person authorized to act for the Administrator.

* * * * *

APHIS representative. An individual employed by APHIS who is authorized to perform that function involved.

Approved herd plan. An affected herd management plan designed by the herd owner, the owner's veterinarian if so requested, and a State, Tribal, or APHIS representative to control and eradicate tuberculosis within the herd. The herd plan must be approved by the State or Tribal animal health official and the Administrator.

* * * * *

Destroyed. Condemned under State authority and either destroyed by slaughter or otherwise euthanized.

* * * * *

Herd depopulation. Destruction of animals within a herd at a location, in a manner, and within a timeframe as specified within an approved herd plan.

* * * * *

Publicly owned. Owned by the Federal government, a State or Tribe, or any regional or local community.

Quarantined feedlot. A facility that is approved by APHIS and/or a State or Tribal animal health official as meeting the standards for such feedlots as these are specified by the Administrator, and that accordingly is authorized to assemble and feed reactor, suspect, or exposed program animals prior to their movement to a recognized slaughtering establishment, another quarantine feedlot, or a quarantine pen.

Reactor cattle, bison, and captive cervids. Cattle, bison, or captive cervids that, for tuberculosis, fall within the scope of the definition of *reactor,* as this is set forth in § 76.0 of this chapter.

* * * * *

State. Any of the States, the District of Columbia, the Commonwealth of Puerto Rico, Guam, the Commonwealth of the Northern Mariana Islands, the U.S. Virgin Islands, or any territory or possession of the United States.

State animal health official. The State official responsible for livestock and poultry disease control and eradication programs in a State.

State representative. An individual employed in animal health work by a State or a political subdivision of a State and authorized by that State to perform the function involved.

* * * * *

■ 3. In § 50.3, paragraph (c) is added to read as follows:

§ 50.3 Payment to owners for animals destroyed.

* * * * *

(c) The Department will not pay indemnity for publicly owned cattle, bison, or captive cervids.

■ 4. In § 50.4, paragraphs (b) and (c) are revised to read as follows:

§ 50.4 Classification of cattle, bison, captive cervids, and other livestock as infected, exposed, or suspect.

* * * * *

(b) Cattle, bison, and captive cervids are considered to be exposed to tuberculosis when, for tuberculosis, they fall within the scope of the definition of *exposed,* as this is set forth in § 76.0 of this chapter.

(c) Cattle, bison, and captive cervids are considered to be suspects for tuberculosis when, for tuberculosis, they fall within the scope of the definition of *suspect,* as this is set forth in § 76.0 of this chapter.

* * * * *

§ 50.14 [Amended]

■ 5. Section 50.14 is amended as follows:

■ a. In paragraph (e)(1), by removing the citation ''§ 77.1'' and adding the citation ''§ 76.0'' in its place.

■ b. In paragraphs (e)(2)(i) and (e)(2)(ii), by removing the words ''an official tuberculin test, as defined in § 77.1'' and adding the words ''an official test, as defined in § 76.0'' in their place.

■ c. By removing and reserving paragraph (f).

PART 51—ANIMALS DESTROYED BECAUSE OF BRUCELLOSIS

■ 6. The authority citation for part 51 continues to read as follows:

Authority: 7 U.S.C. 8301–8317; 7 CFR 2.22, 2.80, and 371.4.

■ 7. Section 51.1 is amended as follows:

■ a. By revising the definitions for *Administrator, brucellosis exposed animal,* and *brucellosis reactor animal.*

■ b. By removing the definition of *complete herd test.*

■ c. By revising the definitions for *destroyed* and *herd depopulation.*

■ d. By adding, in alphabetical order, a definition for *herd plan.*

■ e. By revising the definition of *official seal.*

■ f. By adding, in alphabetical order, the definition for *publicly owned.*

■ g. By revising the definitions for *State, State animal health official,* and *State representative.*

■ h. By removing the definition of *unofficial vaccinate.*

The additions and revisions read as follows:

§ 51.1 Definitions.

* * * * *

Administrator. The Administrator, Animal and Plant Health Inspection Service, or any person authorized to act for the Administrator.

* * * * *

Brucellosis exposed animal. An animal that, for brucellosis, falls within the scope of the definition of *exposed,* as this is set forth in § 76.0 of this chapter.

Brucellosis reactor animal. An animal that, for brucellosis, falls within the scope of the definition of *reactor,* as this is set forth in § 76.0 of this chapter.

* * * * *

Destroyed. Condemned under State authority and either destroyed by slaughter or otherwise euthanized.

* * * * *

Herd depopulation. Destruction of animals within a herd at a location, in a manner, and within a timeframe as specified within a herd plan.

* * * * *

Herd plan. An affected herd management plan designed by the herd owner, the owner's veterinarian if so requested, and a State, Tribal, or APHIS representative to control and eradicate brucellosis within the herd. The herd plan must be approved by the State animal health official and the Administrator.

* * * * *

Official seal. A serially numbered, metal or plastic strip, consisting of a self-locking device on one end and a slot on the other end, which forms a loop when the ends are engaged and which cannot be reused if opened, or a serially numbered, self-locking button.

* * * * *

Publicly owned. Owned by the Federal Government, a State or Tribe, or any regional or local community.

* * * * *

State. Any of the States, the District of Columbia, the Commonwealth of Puerto Rico, Guam, the Commonwealth of the Northern Mariana Islands, the U.S. Virgin Islands, or any territory or possession of the United States.

State animal health official. The State official responsible for livestock and poultry disease control and eradication programs in a State.

State representative. An individual employed in animal health work by a State or a political subdivision of a State and authorized by that State to perform the function involved.

* * * * *

■ 8. In § 51.3, paragraphs (a)(1) introductory text and (a)(1)(i) are revised to read as follows:

§ 51.3 Payment to owners for animals destroyed.

(a) * * *

(1) Owners of the following types of animals destroyed because of brucellosis are eligible to receive Federal indemnity for their animals; except that, indemnity will not be paid for the animals if they are publicly owned.

(i) Cattle and bison classified as reactors for brucellosis;

* * * * *

§ 51.4 [Amended]

■ 9. Section 51.4 is amended by removing the words '', including the reactor tag number of each brucellosis reactor animals and the registration name and number of each brucellosis reactor registered animal''.

§ 51.5 [Amended]

■ 10. In § 51.5, paragraph (b) is removed and reserved.

§ 51.9 [Amended]

■ 11. Section 51.9 is amended as follows:

■ a. In paragraph (b), by removing the citation ''§ 78.1'' and adding the citation ''§ 76.0'' in its place.

■ b. In paragraph (i)(2), by removing the words ''(as defined in § 78.1 of this chapter)''.

§ 51.20 [Amended]

■ 12. In § 51.20, in the definition of *brucellosis reactor animal,* paragraph (3) is amended by removing the words ''as provided in the definition of official test in § 78.1 of this chapter'' and adding the words ''by APHIS'' in their place.

PART 71—GENERAL PROVISIONS

■ 13. The authority citation for part 71 continues to read as follows:

Authority: 7 U.S.C. 8301–8317; 7 CFR 2.22, 2.80, and 371.4.

■ 14. Section 71.1 is amended by revising the definitions of *Administrator, APHIS representative, interstate commerce, State, State animal health official,* and *State representative* to read as follows:

§ 71.1 Definitions.

* * * * *

Administrator. The Administrator, Animal and Plant Health Inspection Service, or any person authorized to act for the Administrator.

* * * * *

APHIS representative. An individual employed by APHIS who is authorized to perform that function involved.

* * * * *

Interstate commerce. Trade, traffic, or other commerce in animals between a place in a State and a place in another State or between places in the same State but through any place outside that State; or trade, traffic, or other commerce in animals within the District of Columbia or any territory or possession of the United States.

* * * * *

State. Any of the States, the District of Columbia, the Commonwealth of Puerto Rico, Guam, the Commonwealth of the Northern Mariana Islands, the U.S. Virgin Islands, or any territory or possession of the United States.

State animal health official. The State official responsible for livestock and poultry disease control and eradication programs in a State.

State representative. An individual employed in animal health work by a State or a political subdivision of a State and authorized by that State to perform the function involved.

* * * * *

§ 71.3 [Amended]

■ 15. Section 71.3 is amended as follows:

■ a. In paragraph (c)(1), by removing the words ''part 78'' and adding the words ''part 76'' in their place.

■ b. In paragraph (c)(3), by removing the words ''the tuberculin test'' and adding the words ''an official test for tuberculosis'' in their place, and by removing the words ''the provisions of § 77.17'' and adding the words ''part 76'' in their place.

§ 71.20 [Amended]

■ 16. Section 71.20 is amended as follows:

■ a. In paragraph (a)(3), by removing the words ''9 CFR parts 71, 75, 78, 79, and 85'' and adding the words ''9 CFR parts 71, 75, 76, 79, and 85'' in their place.

■ b. In paragraph (a)(6), by removing the words ''9 CFR parts 71, 75, 78, 79, and 85'' and adding the words ''9 CFR parts 71, 75, 76, 79, and 85'' in their place.

■ c. In paragraph (a)(8), by removing the words ''9 CFR parts 71, 75, 78, 79, 85, and 86'' and adding the words ''9 CFR parts 71, 75, 76, 79, 85, and 86'' in their place.

■ d. In paragraph (a)(14)(i), by removing the words ''parts 71 and 78'' and adding the words ''parts 71 and 76'' in their place.

■ e. In paragraphs (a)(14)(ii),(iii), and (iv), by removing the words ''part 78'' each time they appear, and adding the words ''part 76'' in their place.

■ f. By removing and reserving paragraphs (a)(14)(v) through (a)(14)(ix).

■ g. In paragraph (a)(18), by removing the words ''9 CFR parts 71, 75, 78, 79, and 85'' each time they appear, and adding the words ''9 CFR parts 71, 75, 76, 79, 85, and 86'' in their place.

■ 17. Part 76 is added to subchapter C to read as follows:

PART 76—BRUCELLOSIS AND BOVINE TUBERCULOSIS

Sec.

Authority: 7 U.S.C. 8301–8317; 7 CFR 2.22, 2.80, and 371.4.

§ 76.0 Definitions.

The following definitions apply to this part:

Accredited herd for bovine tuberculosis. A herd that, in accordance with APHIS' standards for accreditation, has tested negative for bovine tuberculosis using an official test and is subject to measures that lower the risk of bovine tuberculosis introduction into the herd through the addition of animals to the herd. APHIS' standards for accreditation are described in the Program Standards document. States may submit an alternate accreditation standard to the Administrator for evaluation and approval by sending a written request to the address provided in the Program Standards document.

This standard must be at least equally stringent to that within the Program Standards document.

Accredited herd for brucellosis. A herd that, in accordance with APHIS' standards for accreditation, has tested negative for brucellosis using an official test and is subject to measures that lower the risk of brucellosis introduction into the herd through the addition of animals to the herd. APHIS' standards for accreditation are described in the Program Standards document. States may submit an alternate accreditation standard to the Administrator for evaluation and approval by sending a written request to the address provided in the Program Standards document. This standard must be at least equally stringent to that within the Program Standards document.

Accredited veterinarian. A veterinarian approved by the Administrator in accordance with the provisions of part 161 of this title to perform functions specified in parts 1, 2, 3, and 11 of this chapter, and to perform functions required by cooperative State-Federal disease control and eradication programs.

Administrator. The Administrator, Animal and Plant Health Inspection Service, or any person authorized to act for the Administrator.

Affected herd management plan. An affected herd management plan designed by the herd owner, the owner's veterinarian if so requested, and a State, Tribal, or APHIS representative to control and eradicate bovine tuberculosis and/or brucellosis within the herd. The affected herd management plan must be approved by a State or Tribal animal health official and the Administrator.

Animal identification number (AIN). A numbering system for the official identification of individual animals in the United States that provides a nationally unique identification number for each animal. The AIN consists of 15 digits, with the first 3 being the country code (840 for the United States or a unique country code for any U.S. territory that has such a code and elects to use it in place of the 840 code). The alpha characters USA or the numeric code assigned to the manufacturer of the identification device by the International Committee on Animal Recording may be used as an alternative to the 840 or other prefix representing a U.S. territory; however, only the AIN beginning with the 840 or other prefix representing a U.S. territory will be recognized as official for use on AIN tags applied to animals on or after March 11, 2015. The AIN beginning with the 840 prefix may not be applied to animals known to have been born outside the United States.

Annual report form. The annual report form authorized by the Administrator for State and Tribal use to fulfill the requirements of this part. The report form is located on the Web at [*address to be added in final rule*].

APHIS. The Animal and Plant Health Inspection Service of the United States Department of Agriculture.

APHIS representative. An individual employed by APHIS who is authorized to perform the function involved.

Bison. Domestically produced or captive bison.

Bovine tuberculosis. The contagious, infectious, and communicable disease caused by *Mycobacterium bovis.* It is also referred to as tuberculosis.

Brucellosis. The contagious, infectious, and communicable disease caused by *Brucella abortus.* It is also known as Bangs disease, undulant fever, and contagious abortion.

Calf raiser. A cattle production operation in which calves, yearlings, and other sexually immature cattle are brought together and maintained until they are of sufficient size or sexual maturity to move to their next stage of production.

Captive cervid. All species of deer, elk, moose, and all other members of the family Cervidae raised or maintained in captivity for the production of meat and other agricultural products, for sport, or for exhibition, including time such animals are moved interstate; or any wild cervid that is moved interstate, during the period of time from capture until release into the wild. A captive cervid that escapes continues to be considered a captive cervid as long as it bears an official eartag or other official identification approved by the Administrator as unique and traceable with which to trace the animal back to its herd of origin.

Depopulate. To destroy program animals in a herd at a location, in a manner, and within a timeframe as specified within an affected herd management plan.

Epidemiologist designated by the District Director. An epidemiologist selected by the APHIS District Director, in consultation with State or Tribal animal health officials, to perform the function required.

Exposed. An animal that has had association with infected program animals, livestock, or other sources of brucellosis or bovine tuberculosis such that an epidemiologist designated by the District Director determines the animal may be infected.

Feedlot. A facility for assembling and feeding program animals.

Herd. All livestock under common ownership or supervision that are grouped on one or more parts of any single premises (lot, farm, or ranch) for at least 4 months; or all livestock under common ownership for at least 4 months on two or more premises which are geographically separated but on which animals from the different premises have been interchanged or had contact with each other.

Herd test.

(1) For brucellosis:

(i) In any area of a consistent State other than a recognized management area, testing of all sexually intact animals within a herd that are 18 months of age or older, as well as all sexually intact animals in the herd that are less than 18 months of age and were not born into the herd, except those sexually intact animals that are less than 18 months of age and originate directly from a currently accredited herd for brucellosis.

(ii) In any area of a provisionally consistent State other than a recognized management area, testing of all sexually intact animals within a herd that are 12 months of age or older, as well as all sexually intact animals in the herd that are less than 12 months of age and were not born into the herd, except those sexually intact animals that are less than 12 months of age and originate directly from a currently accredited herd for brucellosis.

(iii) In any area of an inconsistent State, or in a recognized management area for brucellosis, testing of all sexually intact animals within a herd that are 6 months of age or older, as well as all sexually intact animals in the herd that are less than 6 months of age and were not born into the herd, except those sexually intact animals that are less than 6 months of age and originate directly from a currently accredited herd for brucellosis.

(2) For bovine tuberculosis:

(i) In any area of a consistent State other than a recognized management area, testing of all animals within a herd that are 18 months of age or older, as well as all animals in the herd that are less than 18 months of age and were not born into the herd, except those animals that are less than 18 months of age and originate directly from a currently accredited herd for bovine tuberculosis.

(ii) In any area of a provisionally consistent State other than a recognized management area, testing of all animals within a herd that are 12 months of age or older, as well as all animals in the herd that are less than 12 months of age and were not born into the herd, except

those animals that are less than 12 months of age and originate directly from a currently accredited herd for bovine tuberculosis.

(iii) In any area of an inconsistent State and in a recognized management area for bovine tuberculosis, testing of all animals within a herd that are 6 months of age or older, as well as all animals in the herd that are less than 6 months of age and were not born into the herd, except those animals that are less than 6 months of age and originate directly from a currently accredited herd for bovine tuberculosis.

Immediate slaughter. Consignment directly to a recognized slaughtering establishment.

Interstate certificate of veterinary inspection (ICVI). An official document issued by a Federal, State, Tribal, or accredited veterinarian certifying the inspection of animals in preparation for interstate movement.

(1) The ICVI must show the species of animals covered by the ICVI; the number of animals covered by the ICVI; the purpose for which the animals are to be moved; the address at which the animals were loaded for interstate movement; the address to which the animals are destined; and the names of the consignor and the consignee and their addresses if different from the address at which the animals were loaded or the address to which the animals are destined. Additionally, the ICVI must list the official identification number of each animal or group of animals moved that is required to be officially identified, or, if an alternative form of identification has been agreed upon by the sending and receiving States or Tribes, the ICVI must include a record of that identification. If the animals are not required by the regulations to be officially identified, the ICVI must state the exemption that applies (*e.g.,* the cattle and bison belong to one of the classes of cattle and bison exempted under § 86.4 of this chapter from the official identification requirements of 9 CFR part 86 during the initial stage of the phase-in of those requirements). If the animals are required to be officially identified but the identification number does not have to be recorded on the ICVI, the ICVI must state that all animals to be moved under the ICVI are officially identified. An ICVI may not be issued for any animal that is not officially identified if official identification is required.

(2) As an alternative to an ICVI, another document may be used to provide this information, but only under the following conditions:

(i) The document is agreed upon by the shipping and receiving States or Tribes as an acceptable alternative to an ICVI; and

(ii) The document is a State or Tribal form or APHIS form that requires individual identification of animals; and

(iii) Each copy of the document identifies each animal to be moved, but any information pertaining to other animals, and any unused space on the document for recording animal identification, is crossed out in ink; and

(iv) The following information is written in ink in the identification column on the original and each copy and is circled or boxed, also in ink, so that no additional information can be added:

(A) The name of the document; and

(B) Either the unique serial number on the document or, if the document is not imprinted with a serial number, both the name of the person who prepared the document and the date the document was signed.

(v) A copy of the document accompanies the program animals during interstate movement.

Livestock. All farm-raised animals.

Location-based numbering system. The location-based number system combines a State or Tribal issued location identification (LID) number or a premises identification number (PIN) with a producer's unique livestock production numbering system to provide a nationally unique and herd-unique identification number for an animal.

Location identification (LID) number. A nationally unique number issued by a State, Tribal, and/or Federal animal health authority to a location as determined by the State or Tribe in which it is issued. The LID number may be used in conjunction with a producer's own unique livestock production numbering system to provide a nationally unique and herd-unique identification number for an animal.

Management area. A clearly delineated geographical area in which a State or Tribe has detected brucellosis or bovine tuberculosis, has determined that there is a risk of transmission of brucellosis or bovine tuberculosis to program animals, and has taken or proposes to take measures to control the spread of the brucellosis or bovine tuberculosis within and from the area and/or to eradicate the disease within the area.

National Uniform Eartagging System (NUES). A numbering system for the official identification of individual animals in the United States that provides a nationally unique identification number for each animal.

Official Brucella vaccine. A vaccine for brucellosis that has been approved by the Administrator and produced under license of the United States Department of Agriculture.

Official brucellosis vaccination program. A brucellosis vaccination program that consists of, at a minimum:

(1) Vaccination of program animals with an official *Brucella* vaccine.

(2) Tattooing to specify the animals' vaccination status.

(3) Identification of the animals with an official eartag designed to specify the animals' vaccination status.

Official eartag. An identification tag approved by APHIS that bears an official identification number for individual animals. Beginning March 11, 2014, all official eartags manufactured must bear an official eartag shield. Beginning March 11, 2015, all official eartags applied to animals must bear an official eartag shield. The design, size, shape, color, and other characteristics of the official eartag will depend on the needs of the users, subject to the approval of the Administrator. The official eartag must be tamper-evident and have a high retention rate in the animal.

Official eartag shield. The shield-shaped graphic of the U.S. Route Shield with ''U.S.'' or the State postal abbreviation or Tribal alpha code imprinted within the shield.

Official identification number. A nationally unique number that is permanently associated with an animal or group of animals and that adheres to one of the following systems:

(1) National Uniform Eartagging System (NUES).

(2) Animal identification number (AIN).

(3) Flock-based number system.

(4) Location-based numbering system.

(5) Any other numbering system approved by the Administrator for the official identification of animals.

Officially identified.

(1) *For cattle and bison:* Identified by means of an official eartag.

(2) *For captive cervids:* Identified by means of an official eartag, by a tattoo containing an official identification number, or by other identification devices acceptable to APHIS and the shipping and receiving States or Tribes.

Official seal. A serially numbered, metal or plastic strip, consisting of a self-locking device on one end and a slot on the other end, which forms a loop when the ends are engaged and which cannot be reused if opened, or a serially numbered, self-locking button.

Official test. Any test that is approved by the Administrator for determining the presence or absence of brucellosis or

bovine tuberculosis in program animals and that is conducted and reported by an official tester. If an official test is applied to a program animal, it must be identified by means of an official eartag. If this eartag uses the NUES system, the eartag must indicate the State or Tribe in which it was applied; if the AIN system, the identification number of the premises on which it was applied. If an animal that is tested already has such an eartag, the information on this eartag must be recorded by the tester.

Official tester. Any person associated with the conducting and reporting of official tests within an official testing laboratory, or any person authorized by the Administrator to conduct and report official tests outside of a laboratory environment.

Official testing laboratory. A laboratory approved by the Administrator in accordance with part 76 of this chapter to conduct official tests.

Owner. Any person who has legal or rightful title to program animals whether or not the animals are subject to a mortgage.

Permit for movement of restricted animals. A document that is issued by an APHIS representative, State or Tribal representative, or accredited veterinarian and that authorizes the restricted interstate movement of livestock to certain specified destinations.

Premises identification number (PIN). A nationally unique number assigned by a State, Tribal, and/or Federal animal health authority to a premises that is, in the judgment of the State, Tribal, and/or Federal animal health authority, a geographically distinct location from other premises. The PIN may be used in conjunction with a producer's own livestock production numbering system to provide a nationally unique and herd-unique identification number for an animal.

Program animals. Cattle, bison, and captive cervids.

Program Standards document. A document providing guidance related to the regulations contained in this part. The Program Standards document is available on the Internet at *http://www.aphis.usda.gov/animal_health/animal_dis_spec/cattle,* or at district VS offices, the addresses for which are located in local telephone directories. Substantive changes to the Program Standards document are announced through notices published in the **Federal Register**. These notices request public comment on the changes.

Qualified accredited veterinarian. An accredited veterinarian who has been granted a program certification by the Administrator pursuant to § 161.5 of this chapter based on completion of an APHIS-approved orientation or training program.

Quarantine feedlot. A facility that is approved by APHIS as having sufficient biosecurity measures in place to assemble and feed exposed program animals, without risk of spread of brucellosis or bovine tuberculosis to other susceptible animals at the facility. Program animals may only be moved interstate from a quarantine feedlot if their movement is to a recognized slaughtering establishment, another quarantine feedlot, or a quarantine pen.

Quarantine pen. An area within a feedlot that is approved by APHIS as having sufficient biosecurity measures in place to assemble and feed exposed program animals, without risk of spread of brucellosis or bovine tuberculosis to other susceptible animals at the facility. Program animals may only be moved interstate from a quarantine feedlot if their movement is to a recognized slaughtering establishment, another quarantine pen, or a quarantine feedlot.

Reactor.

(1) *For brucellosis:* A program animal that has had non-negative test results to an official test such that an epidemiologist designated by the District Director has determined that there is a high likelihood that the animal is infected with brucellosis, and a low likelihood of false positive test results.

(2) *For bovine tuberculosis:* A program animal that has had non-negative test results to an official test such that an epidemiologist designated by the District Director has determined that further action is warranted to make a final determination regarding the animal's disease status.

Recognized slaughtering establishment. Any slaughtering facility operating under the Federal Meat Inspection Act (21 U.S.C. 601 *et seq.*), the Poultry Products Inspection Act (21 U.S.C. 451 *et seq.*), or State meat or poultry inspection acts that is approved in accordance with 9 CFR 71.21.

Reporting period. October 1 of one year through September 30 of the following year.

Responsible person. The individual who is immediately responsible for implementation and maintenance of an animal health plan within a State or Tribe, who is authorized to amend the plan as circumstances warrant, and who will assume responsibility for the State or Tribe's compliance with all provisions of the plan and all requirements in this part.

Spayed heifers. Sexually neutered female cattle or bison.

Specifically approved stockyard. Premises where program animals are assembled for sale purposes and which meet the standards set forth in § 71.20 of this subchapter and are approved by APHIS.

State. Any of the States, the District of Columbia, the Commonwealth of Puerto Rico, Guam, the Commonwealth of the Northern Mariana Islands, the U.S. Virgin Islands, or any territory or possession of the United States.

State or Tribal animal health official. The State or Tribal official responsible for livestock and poultry disease control and eradication programs in a State or Tribe.

State or Tribal representative. An individual employed in animal health work by a State or Tribe, or a political subdivision of a State or Tribe, and authorized by that State or Tribe to perform the function involved.

Steers. Sexually neutered male cattle or bison.

Suspect. A program animal that has had non-negative test results to an official test for brucellosis or bovine tuberculosis that lead an epidemiologist designated by the District Director to determine that the animal should not be classified as a reactor, but cannot be classified as free of brucellosis or bovine tuberculosis.

Test-eligible animal. Unless the Administrator specifies or approves an alternate testing age, *test-eligible animal* means:

(1) For brucellosis, all sexually intact program animals in a herd that are 6 months of age or older, and all program animals in the herd that are less than 6 months of age and were not born into the herd, except those program animals that are less than 6 months of age and originate directly from an accredited herd for brucellosis.

(2) For bovine tuberculosis, all program animals in a herd that are 12 months of age or older, and all program animals in the herd that are less than 12 months of age and were not born into the herd, except those program animals that are less than 12 months of age and originate directly from an accredited herd for bovine tuberculosis; except that, if the herd is located on a calf raiser's premises, all program animals in the herd that are 2 months of age or older are considered test-eligible for bovine tuberculosis.

Tribe. Any Indian Tribe, band, nation, or other organized group or community, including any Alaska Native village or regional or village corporation as defined in or established pursuant to the Alaska Native Claims Settlement Act (85 Stat. 688) [43 U.S.C. 1601 *et seq.*], that is recognized as eligible for the special

programs and services provided by the United States to Indians because of their status as Indians.

United States. All of the States.

§ 76.1 Authority of the Administrator.

Notwithstanding the provisions of this part, the Administrator is authorized pursuant to the Animal Health Protection Act (7 U.S.C. 8301 *et seq.*) to prohibit or restrict the movement in commerce of any animals, if the Administrator considers that prohibition or restriction to be necessary to prevent the dissemination of brucellosis or bovine tuberculosis within the United States. Moreover, pursuant to the Act, the Administrator may also hold, seize, quarantine, treat, destroy, dispose of, or take other remedial action with respect to any animal, article, or means of conveyance that is moving or has moved in interstate commerce, if the Administrator has reason to believe that animal, article, or means of conveyance may carry, have carried, or have been affected with or exposed to brucellosis or bovine tuberculosis at the time of interstate movement.

§ 76.2 Animal health plan requirements.

(a) In order to be considered a consistent or provisionally consistent State or Tribe, a State or Tribe must submit an animal health plan to APHIS via the mail as provided within the Program Standards document, or submit the plan electronically as specified within the Program Standards document. At a minimum, in order to be considered complete, each animal health plan must contain the following categories of information:

(1) Confirmation that the State or Tribe has a legal and regulatory basis for the activities and measures specified within the animal health plan.

(2) A description of the organization and infrastructure of the animal health and wildlife authorities within the State or Tribe. The description must include the animal health and wildlife work force within the State or Tribe that is available to implement or perform activities and maintain and enforce measures specified within the animal health plan, and must demonstrate that the State or Tribe has sufficient resources to implement, maintain, and enforce its animal health plan.

(3) The name and contact information for the responsible person that the State or Tribe has designated to oversee implementation, performance, and enforcement of activities and measures carried out under the plan within the State or Tribe, and the name and contact information for the person that the State has designated to oversee implementation, performance, and enforcement of wildlife activities and measures carried out under the plan. States or Tribes may designate a single individual to serve in multiple roles.

(4) A description of program animal demographics within the State or Tribal lands. The description must include:

(i) The approximate number and types of program animal herds within the State or Tribal lands, and the approximate number of animals in those herds; and

(ii) The approximate number and geographic distribution of any animal concentration points within the State or Tribal lands.

(5) A description of the surveillance activities for brucellosis or bovine tuberculosis in animals within the State or Tribal lands that are being conducted or would be conducted under the animal health plan.[1]

(6) A description of the known sources of brucellosis or bovine tuberculosis that pose a risk of disease introduction into program animals within the State or Tribal lands, and an assessment of the likelihood of transmission of brucellosis or bovine tuberculosis from these sources to program animals within the State or Tribal lands. The description must include:

(i) The approximate number of herds or wildlife populations within the State or Tribal lands that are known sources of brucellosis or bovine tuberculosis, and the approximate number of animals in these herds or populations; and

(ii) The approximate prevalence of brucellosis or bovine tuberculosis infection in those populations, the geographic distribution of the populations within the State or Tribal lands, and any other factors that make the populations a potential source of brucellosis or bovine tuberculosis transmission to program animals within the State or Tribal lands; and

(iii) The potential for exposure of program animals within the State or Tribal lands to these known source populations; and

(iv) Factors, other than mitigation measures that are or would be implemented by the State or Tribe, that may influence this potential for exposure; and

(v) An assessment of the likelihood of transmission of brucellosis or bovine tuberculosis from known source populations to program animals within the State or Tribal lands.

(7) If the State or Tribe has identified known source populations of brucellosis or bovine tuberculosis that pose a risk of disease introduction into program animals within the State or Tribal lands, a description of the measures that the State or Tribe has implemented or would implement to mitigate the risk that program animals within the State or Tribal lands will become infected with brucellosis or bovine tuberculosis.

(8) A description of the epidemiological investigation and affected herd management activities that the State or Tribe has taken or would take in response to occurrences of brucellosis and bovine tuberculosis within program animals in the State or Tribal lands.[2]

(b) *Review.* APHIS will review the plan submitted by the State or Tribe for completeness. When APHIS determines that the plan is complete, it will conduct review and evaluation of the plan. This may include sharing a copy of the plan with persons for technical review and comment. If, based on its review, APHIS determines not to propose to approve the plan, APHIS will contact the State or Tribe that submitted the plan and set forth the deficiencies identified in the plan that preclude APHIS from proposing to approve the plan.

(c) *Proposal of approval; public notification.* Based on its review, APHIS may propose to approve a State or Tribal animal health plan unconditionally, or on the condition that the State or Tribe implement certain provisions of its plan within a specified period of time that it cannot implement immediately upon approval of the plan. In either instance, APHIS will publish a notice in the **Federal Register** announcing proposed approval of the plan and making the plan available for public review and comment. Prior to issuance of this notice, APHIS will ensure that the State or Tribe is prepared for APHIS to make the plan, proposed amendments to the plan, and all reports required by this part publicly available.

(d) *APHIS determination*—(1) *Following a notice proposing unconditional approval of an animal health plan.* (i) If no comments are received on the notice, or if the comments received do not affect APHIS' conclusion that the plan may be approved unconditionally, APHIS will publish a subsequent notice in the **Federal Register** announcing that the plan has been approved

[1] Minimum requirements for surveillance activities conducted under an animal health plan are set forth in § 76.6.

[2] Minimum requirements for epidemiological investigation and affected herd management activities conducted under an animal health plan are set forth in § 76.7.

unconditionally, and designating the State or Tribe as a consistent State or Tribe.

(ii) If the comments received on the notice suggest that the plan should be approved, but that the State or Tribe cannot implement certain provisions of its animal health plan immediately upon approval of the plan, and, after reviewing the information, APHIS agrees, APHIS will publish a subsequent notice in the **Federal Register** announcing that the plan has been approved conditionally, and designating the State or Tribe as a provisionally consistent State or Tribe. The notice will also specify the provisions of the plan that APHIS has determined cannot be implemented immediately and the time period in which they must be implemented. The notice may also specify restrictions on the interstate movement of program animals or other program requirements that apply to the State or Tribe while it is in provisionally consistent status.

(iii) If the comments received suggest that the plan should not be approved, and, after reviewing the information, APHIS agrees, APHIS will publish a subsequent notice in the **Federal Register** describing the comments that it received, its reevaluation of the plan in light of those comments, and its reasons why it cannot approve the plan.

(2) *Following a notice proposing conditional approval of an animal health plan.* (i) If no comments are received on the notice, or if the comments received do not affect APHIS' conclusion that the plan may be approved on the condition that the State or Tribe implement certain provisions of its plan within a specified period of time that it cannot implement immediately upon approval of the plan, APHIS will publish a subsequent notice in the **Federal Register** announcing that the plan has been approved conditionally, and designating the State or Tribe as a provisionally consistent State or Tribe. The notice will also specify the provisions of the plan that APHIS has determined cannot be implemented immediately and the time period in which they must be implemented. The notice may also specify restrictions on the interstate movement of program animals or other program requirements that apply to the State or Tribe while it is in provisionally consistent status.

(ii) If the comments received suggest that the plan should not be approved, and, after reviewing the information, APHIS agrees, APHIS will publish a subsequent notice in the **Federal Register** describing the comments that it received, its reevaluation of the plan in light of those comments, and its reasons why it cannot approve the plan.

(e) *Subsequent notification regarding conditionally approved plans.* If APHIS approves a State or Tribal animal health plan on the condition that the State or Tribe implement certain provisions of its plan within a specified period of time that it cannot implement immediately upon approval of the plan, APHIS will publish a subsequent notice in the **Federal Register** announcing whether the State or Tribe has implemented all provisions of its plan within that period of time.

(1) If the State or Tribe has implemented the provisions, the notice will also announce that APHIS now considers the plan unconditionally approved, and has redesignated the State or Tribe as a consistent State or Tribe.

(2) If the State or Tribe has not implemented all the provisions, the notice will also announce that APHIS has withdrawn approval of the plan, and has redesignated the State or Tribe as an inconsistent State or Tribe.

(f) *Amendments*—(1) *Amendments initiated by APHIS.* If APHIS determines that the activities or measures specified in an approved animal health plan no longer correspond to the risk of spread of brucellosis or bovine tuberculosis, APHIS will make ongoing approval of the plan contingent on the State or Tribe amending the plan in a manner that APHIS approves of. The amended plan must be submitted to APHIS via the mail as provided within the Program Standards document, or electronically as provided within the Programs Standards document.

(2) *Amendments initiated by a State or Tribe.* If a State or Tribe wishes to amend its animal health plan, the State or Tribe must submit proposed amendments to the plan to APHIS via the mail as provided within the Program Standards document, or submit the proposed amendments electronically as provided within the Programs Standards document. Amendments will be subject to the review process specified in paragraphs (b) through (d) of this section.

(g) *Compliance reviews.* APHIS reserves the right to conduct a review of States or Tribes at any point for compliance with their approved animal health plan. Such a compliance review may include site visits and/or documentation review.

§ 76.3 State or Tribal classifications.

(a) Each State within the United States is classified according to one of the classifications for brucellosis and bovine tuberculosis listed below. Tribes will be classified according to these classifications, provided that they have submitted a Tribal animal health plan to APHIS for review and approval in accordance with the process set forth in § 76.2, and APHIS has approved the animal health plan. A State or Tribal classification for brucellosis and bovine tuberculosis may differ.

(1) Consistent.

(2) Provisionally consistent.

(3) Inconsistent.

(b) *Initial designation of status*—(1) *Consistent.* APHIS will initially designate a State or Tribe as a consistent State or Tribe if APHIS approves the State's or Tribe's animal health plan unconditionally, in accordance with the process set forth in § 76.2.

(2) *Provisionally consistent.* APHIS will initially designate a State or Tribe as a provisionally consistent State or Tribe if APHIS approves the State or Tribe's animal health plan on the condition that it implement certain provisions of its plan within a specified period of time that it cannot implement immediately upon approval of the plan, in accordance with the process set forth in § 76.2.

(3) *Inconsistent*—(i) *States.* If a State does not have an animal health plan that has been approved by APHIS by [*Date of publication of notice in the Federal Register*], the State will be considered an inconsistent State.

(ii) *Tribes.* Tribes will not initially be designated as inconsistent.

(c) *Conditions for redesignation to a lower classification*—(1) *From consistent to provisionally consistent.* If any of the following occurs, APHIS may redesignate a consistent State or Tribe as a provisionally consistent State or Tribe:

(i) The State or Tribe fails to implement or perform an activity or maintain a measure specified within its animal health plan, and APHIS has determined that this failure may result in the spread of brucellosis or bovine tuberculosis.

(ii) The State or Tribe fails to submit an annual report as specified in § 76.4(a).

(iii) The State or Tribe fails to submit an initial epidemiological investigation situation report within 14 days of the period of time specified in § 76.4(c) for submitting such a report.

(iv) The State or Tribe fails to submit an updated epidemiological investigation situation report as specified in § 76.4(d).

(v) On more than one occasion, the State or Tribe fails to submit a closing report as specified in § 76.4(e).

(vi) The State or Tribe fails to meet national surveillance levels as these are specified within the National

Surveillance Plans for brucellosis or bovine tuberculosis or as these are specified within an alternate State or Tribal plan that has been approved by APHIS.[3]

(vii) The State or Tribe fails to conduct targeted surveillance of wildlife source populations as specified in § 76.6(b)(1).

(viii) The State or Tribe fails to conduct targeted surveillance of at-risk program animals as specified in § 76.6(b)(2).

(ix) The State or Tribe has failed to conduct an investigation of a program animal with non-negative test results for brucellosis in accordance with § 76.7(a), or to send a report regarding those activities as specified in § 76.4(b).

(2) *From consistent to inconsistent.* If any of the following occurs, APHIS may redesignate a consistent State or Tribe as an inconsistent State or Tribe:

(i) The State or Tribe fails to implement or perform an activity or maintain a measure specified within its animal health plan, or fails to amend the plan in response to a request from APHIS, and APHIS determines that this failure has resulted or may result in the spread of brucellosis or bovine tuberculosis.

(ii) On more than one occasion, the State or Tribe fails to submit an annual report as specified in § 76.4(a).

(iii) On more than one occasion, the State or Tribe fails to submit an initial epidemiological investigation situation report within 14 days of the period of time specified in § 76.4(c) for submitting such a report.

(iv) On more than one occasion, the State or Tribe fails to submit an updated epidemiological investigation situation report as specified in § 76.4(d).

(v) APHIS has terminated recognition of the State or Tribe's management area.

(vi) The State or Tribe refuses to participate in or otherwise conduct surveillance as specified in § 76.6(a).

(vii) On more than one occasion, the State or Tribe has failed to conduct an investigation of a program animal with non-negative test results for brucellosis in accordance with § 76.7(a), or to send a report regarding those activities as specified in § 76.4(b).

(viii) The State or Tribe fails to conduct epidemiological investigations as specified in § 76.7(b).

(ix) The State or Tribe fails to conduct affected herd management as specified in § 76.7(e).

(3) *From provisionally consistent to inconsistent.* A provisionally consistent State or Tribe may be redesignated to inconsistent for any of the reasons specified in paragraph (c)(2) of this section. Additionally, if a provisionally consistent State or Tribe fails to implement provisions of its animal health plan or take required remedial measures within the period of time specified by APHIS for implementing these provisions or taking these measures, APHIS will redesignate the State or Tribe as an inconsistent State or Tribe.

(d) *Notification of redesignation*—(1)(i) *Notice regarding redesignation from consistent to provisionally consistent status.* Whenever APHIS redesignates a consistent State or Tribe as a provisionally consistent State or Tribe, APHIS will publish a notice in the **Federal Register** announcing this redesignation. The notice will also state the reason or reasons that led to the redesignation and the remedial measures APHIS considers necessary for the State or Tribe to complete in order to regain consistent status. The notice may also specify restrictions on the interstate movement of program animals or other program requirements that apply to the State or Tribe while it is in provisionally consistent status. While a State or Tribe is in provisionally consistent status, APHIS may publish an additional notice in the **Federal Register** announcing additional remedial measures, as circumstances warrant.

(ii) *Notice regarding termination of provisionally consistent status.* (A) If the State or Tribe completes the required remedial measures, APHIS will publish a notice in the **Federal Register** announcing that it has redesignated the State or Tribe as a consistent State or Tribe.

(B) If the State or Tribe fails to take the required remedial measures, APHIS will publish a notice in the **Federal Register** announcing that it has redesignated the State or Tribe as an inconsistent State or Tribe.

(2) *Notice regarding immediate redesignation from consistent or provisionally consistent to inconsistent status.* Whenever APHIS immediately redesignates a consistent or provisionally consistent State or Tribe as an inconsistent State or Tribe, APHIS will publish a notice in the **Federal Register** announcing this redesignation.

(e) *Inconsistent status; conditions for regaining consistent status.* If a State or Tribe has been redesignated to inconsistent status, in order to regain consistent status, the State or Tribe must:

(1) Take appropriate remedial measures, as determined by APHIS, to address the issue or issues that led to redesignation to inconsistent status;

(2) Submit amendments to its animal health plan to APHIS for review and approval in accordance with the process set forth in § 76.2; and

(3) Submit any additional outstanding annual reports, initial investigation reports, initial or updated epidemiological investigation situation reports, and closing reports.

(f) *Listing.* Lists of all consistent, provisionally consistent, and inconsistent States and Tribes are located on the Internet, at [*address to be added in final rule*]. The lists are also available at district APHIS Veterinary Services (VS) offices, addresses for which are located in local telephone directories. The lists specify a State or Tribe's classification for brucellosis, and its classification for bovine tuberculosis.

§ 76.4 Reporting requirements.

States must submit the following reports:

(a) *Annual reports.* Within 60 days of the end of the reporting period, a State must submit a completed annual report form to APHIS as provided in the Program Standards document. Additionally:

(1) If the State has submitted an initial epidemiological investigation situation report to APHIS, but has not yet submitted a corresponding closing report, the State must submit additional information regarding epidemiological activities related to that incident undertaken during the reporting period within the annual report form.

(2) If the State has an animal health plan that has been approved by APHIS, the State must submit a summary of any changes to the categories of information in that plan that have occurred during the reporting period along with the annual report form, unless the State has already submitted amendment requests to APHIS that incorporate these changes to its plan.

(b) *Initial investigation reports.* Whenever a State initiates an investigation of an animal with non-negative test results for brucellosis or an animal determined to be infected with brucellosis or bovine tuberculosis in accordance with § 76.7, the State must provide a report regarding the investigation within 15 days of initiation of the investigation.

(c) *Initial epidemiological investigation situation reports.* Whenever a State initiates an epidemiological investigation of an affected herd in accordance with § 76.7, the State must provide a report of that epidemiological investigation to APHIS within 15 days of the date when the State is notified that an animal from the herd has been determined to be infected

[3] See § 76.6(a).

with brucellosis or bovine tuberculosis. The report must be sent to APHIS as provided within the Program Standards document.

(d) *Updated epidemiological investigation situation reports.* Every 4 weeks following submission of an initial situation report or initial epidemiological situation report, and more frequently at the Administrator's request, a State must submit subsequent reports updating information in the initial situation report or initial epidemiological investigation situation report. The reports must be sent to APHIS as provided within the Program Standards document.

(e) *Closing reports.* Within 60 days following the conclusion of an epidemiological investigation of an affected herd, a State must submit a closing report to APHIS. The report must be sent to APHIS as provided within the Program Standards document.

(f) *Additional reporting requirements for States with recognized management areas.* Additional reporting requirements for States with recognized management areas are specified in § 76.5(f).

(g) *Additional reporting requirements as part of redesignation to provisionally consistent status.* If a consistent State is redesignated as provisionally consistent, additional reporting requirements for the State may be specified in the notice in the **Federal Register** that announces such redesignation.

(h) *Reporting requirements; applicability to Tribes.* The requirements in this section pertain to Tribes, provided that they have submitted a Tribal animal health plan to APHIS for review and approval in accordance with the process set forth in § 76.2, and APHIS has approved the animal health plan.

§ 76.5 Recognized management areas.

(a) A State or Tribe may request APHIS recognition of a management area within the State or Tribal lands.

(b) *Process for requesting recognition of a management area*—(1) *States or Tribes without an approved animal health plan.* If a State or Tribe does not have an animal health plan that has been approved by APHIS and wishes to request APHIS recognition of a management area, the State or Tribe must submit a request for recognition of the management area when it submits an animal health plan to APHIS in accordance with the process set forth in § 76.2.

(2) *States or Tribes with an approved animal health plan.* If a State or Tribe has an animal health plan that has been approved by APHIS and wishes to request APHIS recognition of a management area, the State or Tribe must submit a request for recognition of the management area by submitting an amendment to its animal health plan in accordance with the process set forth in § 76.2.

(c) *Requirements for a request to recognize a management area.* (1) Except as provided in paragraph (c)(2) of this section, any request to recognize a management area must contain the following categories of information.

(i) A description of the geographical area that the State or Tribe requests to be recognized as a management area. The description must specify continuous and uninterrupted boundaries for the management area.

(ii) A description of the assessments and activities that the State or Tribe has conducted or plans to conduct to support the specified boundaries for the management area and a timeline of implementation of these activities. At a minimum, the activities specified must provide assurances that the boundaries for the management area continually reflect current epidemiological knowledge about the extent of disease and risk of transmission of disease within and from the area, and must include:

(A) Epidemiological investigations.

(B) Surveillance activities within the management area to determine or further delineate sources of brucellosis and/or bovine tuberculosis.

(C) Surveillance activities outside of the boundaries of the management area sufficient to detect brucellosis or bovine tuberculosis infection in program animals that originate from or are otherwise related to the management area.

(iii) A description of the known sources of brucellosis or bovine tuberculosis that pose a risk of disease introduction into program animals within and surrounding the management area, and an assessment of the likelihood of spread of brucellosis or bovine tuberculosis from these sources to program animals. This description must include:

(A) The approximate number of herds, individual program animals, and susceptible wildlife populations within the management area and in the area surrounding the management area as this surrounding area is determined in consultation with an epidemiologist designated by the District Director; and

(B) The number of affected herds or wildlife populations detected within the management area since the first investigation or surveillance activity specified by the State or Tribe in order to fulfill the requirements of paragraph (c)(1)(ii) of this section was conducted, the approximate number of animals in these herds or source populations, and the approximate prevalence of brucellosis or bovine tuberculosis infection in these herds or populations during that time period; and

(C) The potential for exposure of program animals to these known affected herds or wildlife populations; and

(D) Any factors, other than mitigation measures maintained by the State or Tribe, that may influence this potential for exposure; and

(E) An assessment of the likelihood of transmission of brucellosis or bovine tuberculosis from known affected herds or wildlife populations to program animals within and surrounding the management area.

(iv) A description of the measures that the State or Tribe has implemented or would implement to mitigate the risk that program animals within the State or Tribal lands will become infected with brucellosis or bovine tuberculosis, a timeline for implementation of these measures, and the means by which the State or Tribe has monitored and enforced or plans to monitor and enforce these measures. For all management areas, measures must include conditions for the movement of program animals from the management area, herd testing of at least a targeted representative sample of herds of program animals within the area, and change-of-ownership testing of all test-eligible program animals that reside within the area. For management areas for brucellosis, the measures must also include an official brucellosis vaccination program.

(v) A citation of or hyperlink to the laws and regulations that authorize the State or Tribe's establishment of the management area.

(vi) A description of the personnel that the State or Tribe has used or plans to use in order to implement or perform activities or maintain measures associated with the management area. This description must demonstrate that the State or Tribe has sufficient personnel to implement and perform these activities and maintain these measures, and must include:

(A) The name, contact information, and affiliation of the person within the State or Tribe who will assume responsibility for implementation and performance of activities and maintenance and enforcement of measures associated with the management area; and

(B) The name, contact information, and affiliation of all personnel assigned

to the implementation and performance of activities and maintenance and enforcement of measures associated with the management area; and

(C) The role or roles assigned to these personnel.

(vii) Information demonstrating that all program animals that are moved from the management area are or will be required to be officially identified prior to movement.

(2) If a State had a geographical area designated as a zone for bovine tuberculosis or covered by a brucellosis management plan prior to (*Effective date of final rule*), and the State wishes the geographical area to continue to be recognized as a management area, the State's request for recognition of that area as a management area only needs to contain those categories of information that the State has not already submitted to APHIS.

(d) *APHIS review.* APHIS will review each proposal for recognition of a management area in accordance with the process set forth in § 76.2 for review of an animal health plan or amendment to an animal health plan.

(e) *APHIS determination.* In communicating its determination to approve or not approve an animal health plan or amendment to an animal health plan in accordance with the process set forth in § 76.2, APHIS will also communicate its determination to recognize or not recognize the requested management area. If APHIS recognizes the requested management area, the request for recognition of the area will be considered part of the State or Tribe's animal health plan. APHIS will not recognize a management area in a State or on Tribal lands if it determines not to approve that State or Tribe's animal health plan.

(f) *Annual reporting.* In addition to the annual reporting requirements contained in § 76.4(a), States or Tribes with recognized management areas must submit a separate annual report form for each recognized management area in the State or Tribe.

(g) *Amendments to recognized management areas.* If a State or Tribe with a recognized management area wishes to expand or contract the geographical boundaries of the management area, or determines that any information in its request for recognition of the management area has substantively changed, the State or Tribe must submit amendments to its animal health plan that reflect these changes to APHIS in accordance with the process set forth in § 76.2.

(h) *Termination of management areas*—(1) *Termination initiated by the State or Tribe.* In order for APHIS to recognize termination of a management area, a State or Tribe must submit amendments to its animal health plan that reflect this termination in accordance with the process set forth in § 76.2. Additionally, the State or Tribe must provide an explanation of the reasons for the termination.

(2) *Termination initiated by APHIS.* (i) If APHIS determines that a State or Tribe has failed to implement or maintain measures specified within its proposal for recognition of a management area for brucellosis or bovine tuberculosis, APHIS will terminate recognition of all management areas for the disease or diseases within the State or Tribal lands, and will redesignate the State or Tribe an inconsistent State or Tribe for the disease or diseases.

(ii) If APHIS redesignates a State or Tribe as an inconsistent State or Tribe for brucellosis or bovine tuberculosis, APHIS will also terminate recognition of all management areas for that disease within the State or Tribal lands as part of this redesignation.

(3) *APHIS review of State or Tribal requests.* If a State or Tribe requests recognition of termination of a management area, APHIS will review the request in accordance with the process set forth in § 76.2 for review of an amendment to an animal health plan.

(4) *APHIS determination.* APHIS will communicate its determination regarding termination of a recognized management area in accordance with the process set forth in § 76.2 for communication of a determination regarding amendments to an animal health plan.

§ 76.6 Surveillance requirements.

(a) *National surveillance.* All States must agree to participate in the National Surveillance Plans for Brucellosis and Bovine Tuberculosis, found online at [*address to be added in final rule*], or must conduct equivalent surveillance in a manner approved by APHIS.

(1) *Failure to meet surveillance levels.* If a State fails to meet the surveillance levels set forth in the National Surveillance Plans or otherwise approved by APHIS, the State may be redesignated to a lower State classification.

(2)(i) *Refusal to participate in or otherwise conduct such surveillance.* If a consistent or provisionally consistent State refuses to participate in or otherwise conduct such surveillance, the State will be redesignated as an inconsistent State.

(ii) If an inconsistent State refuses to participate in or otherwise conduct such surveillance, the interstate movement of program animals from that State will be subject to such restrictions or prohibitions as the Administrator considers necessary to prevent the dissemination of brucellosis or bovine tuberculosis from the State. In such instances, the restrictions or prohibitions will be announced through a notice in the **Federal Register**.

(b) *Targeted surveillance within a State.* (1) *Surveillance of source populations.* If a consistent or provisionally consistent State has identified a known source of brucellosis or bovine tuberculosis transmission within wildlife in the State in its animal health plan and determined that this source population presents a risk of transmitting brucellosis or bovine tuberculosis to program animals, in order to maintain consistent or provisionally consistent status, the State must conduct surveillance of that source population in a manner approved by APHIS as sufficient to detect brucellosis or tuberculosis in an animal within the source population. A consistent State that fails to conduct such surveillance will be redesignated as provisionally consistent. A provisionally consistent State that fails to conduct such surveillance may be redesignated as inconsistent.

(2) *Surveillance of at-risk populations.* If a consistent or provisionally consistent State has identified a known source of brucellosis or bovine tuberculosis transmission in the State in its animal health plan and has determined that this source population presents a risk of transmitting brucellosis or bovine tuberculosis to program animals, in order to maintain consistent or provisionally consistent status, the State must conduct annual herd testing of all herds of at-risk program animals, or alternatively, a statistically representative sample of those herds, as determined by APHIS. A consistent State that fails to conduct such surveillance will be redesignated as provisionally consistent. A provisionally consistent State that fails to conduct such surveillance will be redesignated as inconsistent.

(c) *Surveillance within recognized management areas.* States must conduct surveillance within a recognized management area in the manner specified within that section of the State's animal health plan that pertains to the management area. Failure to conduct such surveillance will result in termination of recognition of the management area and redesignation of the State as an inconsistent State.

(d) *Additional surveillance as part of redesignation to provisionally consistent status.* If a consistent State is

redesignated as provisionally consistent, additional surveillance requirements for the State may be specified in the notice in the **Federal Register** that announces such redesignation.

(e) *Surveillance requirements; applicability to Tribes.* The requirements in this section pertain to Tribes, provided that they have submitted a Tribal animal health plan to APHIS for review and approval in accordance with the process set forth in § 76.2, and APHIS has approved the animal health plan.

§ 76.7 Epidemiological investigations and affected herd management.

(a) *Investigations of animals with non-negative test results for brucellosis.* If a program animal has a non-negative test result for brucellosis, within 15 days of receiving notification of these results, the State in which the animal was detected must initiate an investigation to determine the herd from which the animal originated and all herds in which it has resided. A consistent State that fails to conduct such an investigation on one occasion may be redesignated as provisionally consistent. A consistent or provisionally consistent State that fails to conduct such an investigation on multiple occasions may be redesignated as inconsistent.

(b) *Epidemiological investigations.* Unless a State has submitted an alternate protocol to APHIS by submitting a written request to the address provided in the Program Standards document, and the Administrator has authorized this alternate protocol:

(1) If a program animal is determined to be infected with brucellosis or bovine tuberculosis, within 15 days of this determination, the State in which the infected animal was detected must identify the herd from which the infected animal originated and all herds in which it has resided, impose the restrictions specified in §§ 76.9 and 76.10 on the interstate movement of animals from those herds, impose substantially similar restrictions on intrastate movement, and begin determining the disease status of all test-eligible animals in those herds.

(2) If a herd of program animals is determined to be affected with brucellosis or bovine tuberculosis, within 15 days of this determination, the State in which the herd resides must identify and impose the restrictions specified in §§ 76.9 and 76.10 on the interstate movement of animals from the following herds, impose substantially similar restrictions on intrastate movement, and begin determining the disease status of all test-eligible animals in those herds.

(i) Any herd into which program animals from the affected herd may have been moved; and

(ii) Any herd from which program animals in the affected herd may have originated or in which they may have resided; and

(iii) Any herd, individual program animals, or other animals that are susceptible to brucellosis or bovine tuberculosis that may have commingled with or otherwise been exposed to the affected herd, as determined by the Administrator and communicated to the State.

(3) If the State in which an infected animal or affected herd was detected determines that any of these herds or animals are located in a different State than the infected animal or affected herd, the State in which the infected animal or affected herd was detected must notify both that State and APHIS, in writing, within 3 days. APHIS notification must be submitted to the address specified in the Program Standards document.

(4) If a non-program animal within a State is determined to be infected with brucellosis or bovine tuberculosis and the Administrator determines that this animal presents a risk of transmitting brucellosis or bovine tuberculosis to program animals, the State or States surrounding the detection must identify all herds that may have been exposed to brucellosis or bovine tuberculosis because of this detection, as determined by the Administrator and communicated to the States, impose the restrictions specified in §§ 76.9 and 76.10 on the interstate movement of animals from those herds, impose substantially similar restrictions on intrastate movement, and must determine the disease status of all test-eligible animals in those herds.

(5) If an animal infected with brucellosis or bovine tuberculosis is discovered on or has been determined to have originated from a calf raiser's premises or feedlot, the State in which the calf raiser's premises or feedlot is located must conduct an epidemiological investigation of that premises or feedlot according to a method that has been approved by the Administrator. An approved method for conducting such an investigation is set forth in the Program Standards document.

(c) *Conditions for determining whether a herd is affected with brucellosis or bovine tuberculosis.* (1) If all test-eligible program animals in a herd under investigation are determined to be negative for brucellosis or bovine tuberculosis, the herd is not an affected herd. No further action is required and the State may remove the restrictions on the movement of those animals.

(2) If any test-eligible animals in a herd under investigation are determined to be infected with brucellosis or bovine tuberculosis, the herd is considered an affected herd.

(d) *Failure to conduct an epidemiological investigation in accordance with this section.* (1) If a consistent or provisionally consistent State fails to conduct an epidemiological investigation in accordance with this section, that State will be redesignated as inconsistent.

(2) If an inconsistent State fails to conduct an epidemiological investigation in accordance with this section, the interstate movement of program animals from that State will be subject to such restrictions or prohibitions as the Administrator considers necessary to prevent the dissemination of brucellosis or bovine tuberculosis from the State. In such instances, the restrictions or prohibitions will be announced through a notice in the **Federal Register**.

(e) *Affected herd management.* States must manage affected herds through one of the following methods:

(1) Depopulation.

(2) A test-and-remove protocol approved by the Administrator. In order to be approved by the Administrator, the protocol must demonstrate that:

(i) The State has implemented and is enforcing movement restrictions on the affected herd.

(ii) The State has implemented and is enforcing an affected herd management plan for the affected herd to prevent the spread of brucellosis or bovine tuberculosis.

(iii) The State has implemented and is conducting a protocol to periodically test program animals in the affected herd for brucellosis or bovine tuberculosis and to remove and destroy those animals that do not test negative.

(iv) The State has a protocol in place to conduct periodic assurance testing of the herd once the test-and-remove protocol is complete.

(f) *Failure to conduct affected herd management in accordance with this section.* (1) If a consistent or provisionally consistent State fails to manage an affected herd through one of the methods specified in paragraph (e) of this section, the State will be redesignated as inconsistent.

(2) If an inconsistent State fails to manage an affected herd through one of the methods specified in paragraph (e) of this section, the interstate movement of program animals from that State will

be subject to such restrictions or prohibitions as the Administrator considers necessary to prevent the dissemination of brucellosis or bovine tuberculosis from the State. In such instances, the restrictions or prohibitions will be announced through a notice in the **Federal Register**.

(g) *Epidemiological investigation and affected herd management requirements; applicability to Tribes.* The requirements in this section pertain to Tribes, provided that they have submitted a Tribal animal health plan to APHIS for review and approval in accordance with the process set forth in § 76.2, and APHIS has approved the animal health plan.

Subpart A—General Categories of Livestock

§ 76.8 Interstate movement of infected livestock generally prohibited.

Except as provided for in § 71.3(d)(7) of this subchapter, the interstate movement of any livestock known to be infected with brucellosis or bovine tuberculosis is prohibited.

§ 76.9 Interstate movement of program animals from a herd containing a reactor or suspect.

Except as provided in § 76.10, the interstate movement of program animals from a herd containing a reactor or suspect for brucellosis or bovine tuberculosis is prohibited, until the disease status of all test-eligible animals in that herd is determined.

§ 76.10 Interstate movement of reactor, suspect, and exposed program animals.

Notwithstanding the other provisions of this part, program animals that have been classified as brucellosis or bovine tuberculosis reactors, suspects, or exposed animals may be moved interstate if:

(a) The animals are officially identified; and

(b) The animals are accompanied by a permit for movement of restricted animals issued by an APHIS or State or Tribal representative; and

(c) The permit for movement of restricted animals clearly specifies the brucellosis or bovine tuberculosis classification of the animals; and

(d) The animals are moved for diagnostic testing, immediate slaughter, necropsy, or other use as approved by the Administrator; and

(e) The animals are moved to a location specified by the Administrator as an approved location for reactor, suspect, or exposed animals; [4] and

(f) The animals are moved in a means of conveyance containing only animals not susceptible to brucellosis and/or bovine tuberculosis or animals destined for immediate slaughter or necropsy; and

(g)(1) The means of conveyance in which the animals are moved interstate is secured with official seals applied and removed by an authorized APHIS representative, Food Safety and Inspection Service inspector, State or Tribal representative, accredited veterinarian, or other individual authorized for this purpose by an APHIS representative; or

(2) The animals are accompanied during movement by an APHIS representative, Food Safety and Inspection Service inspector, State or Tribal representative, or other individual authorized for this purpose by an APHIS representative; and

(h) After shipment, each means of conveyance in which the animals have been transported is cleaned and disinfected by the carrier in accordance with part 71 of this subchapter, under the supervision of an APHIS representative, Food Safety and Inspection Service inspector, State or Tribal representative, accredited veterinarian, or other person designated by the Administrator.

Subpart B—Cattle and Bison

§ 76.11 Interstate movement of cattle and bison generally restricted.

Except as provided in §§ 76.8 through 76.10, unless the Administrator has provided public notification of alternate conditions for movement, cattle and bison may only be moved interstate in accordance with this subpart.

§ 76.12 Interstate movement of cattle and bison from consistent States or Tribes for brucellosis and bovine tuberculosis.

(a) *Rodeo, event, or exhibited cattle or bison.* Rodeo, event, or exhibited cattle or bison may be moved interstate from a consistent State or Tribe for brucellosis and bovine tuberculosis provided that:

(1) The cattle or bison are tested for bovine tuberculosis using an individual official test no more than 60 days prior to initial interstate movement from the premises of origin, with negative results; [5] and

(2) If the cattle or bison are sexually intact and 6 months of age or older, they are tested for brucellosis using an individual official test no more than 60 days prior to initial interstate movement from the premises of origin, with negative results; and

(3) The cattle or bison are tested for bovine tuberculosis using an individual official test no more than 180 days prior to any subsequent interstate movement, with negative results; and

(4) If the cattle or bison are sexually intact and 6 months of age or older, they are tested for brucellosis using an individual official test no more than 180 days prior to any subsequent interstate movement, with negative results; and

(5) The cattle or bison are accompanied during interstate movement by an ICVI with a statement regarding the date, location, and test results of the official tests for bovine tuberculosis and, if applicable, brucellosis administered prior to initial interstate movement, and the date, location, and test results of the last official test for bovine tuberculosis and, if applicable, brucellosis administered to the animals; and

(6) The cattle or bison are officially identified.

(b) *Movement of all other cattle or bison*—(1) *Movement from all areas of a consistent State or Tribe other than a recognized management area.* Cattle or bison that are not rodeo, event, or exhibited cattle or bison may be moved from any area of a consistent State or Tribe for brucellosis and bovine tuberculosis, other than from a recognized management area in the State or Tribe, without further restriction under this part.[6]

(2) *Movement from a recognized management area within a consistent State or Tribe.* Cattle or bison that are not rodeo, event, or exhibited cattle or bison may be moved interstate from a recognized management area within a consistent State or Tribe for brucellosis and bovine tuberculosis if the cattle or bison are moved in accordance with the conditions for movement of program animals from the recognized management area specified in the State or Tribe's animal health plan.

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[4] Approved locations include recognized slaughtering establishments, specifically approved stockyards, official testing laboratories, research facilities, and, for exposed animals that have tested negative for brucellosis or bovine tuberculosis, quarantine feedlots and quarantine pens. A State may request approval of alternate locations by specifying the locations within its animal health plan or proposing to amend the health plan to specify the locations.

[5] The requirements of this and the following paragraph apply not only to rodeo, event, or exhibited cattle or bison that have been produced within the United States, but also rodeo, event, or exhibited cattle and bison of foreign origin after they have arrived at their destination within the United States.

[6] The cattle or bison are still subject to all other applicable restrictions of 9 CFR chapter I, including those of §§ 71.3, 71.17, 86.4, and 86.5.

§ 76.13 Interstate movement of cattle and bison from a provisionally consistent State or Tribe.

(a) Unless specified otherwise in the notice in the **Federal Register** designating the State or Tribe as a provisionally consistent State or Tribe, cattle or bison that are moved interstate from a provisionally consistent State or Tribe are subject to the relevant conditions for movement in § 76.12.

(b) If the notice in the **Federal Register** designating the State or Tribe as a provisionally consistent State or Tribe specifies restrictions on the interstate movement of cattle or bison from the State or Tribe, and these restrictions differ from the conditions for interstate movement specified in § 76.12, the interstate movement of such cattle or bison is subject to the restrictions specified in the notice in the **Federal Register.**

§ 76.14 Interstate movement of cattle and bison from inconsistent States or Tribes for brucellosis.

(a) *Sexually intact cattle or bison that are 6 months of age or older*—(1) *Cattle or bison destined for immediate slaughter.* Sexually intact cattle or bison that are 6 months of age or older and are destined for immediate slaughter may be moved interstate from an inconsistent State or Tribe for brucellosis, if:

(i) The cattle or bison are officially identified; and

(ii) The cattle or bison are accompanied by an ICVI.

(2) *Cattle or bison not destined for immediate slaughter.* Sexually intact cattle or bison that are 6 months of age or older and that are not destined for immediate slaughter may be moved interstate from an inconsistent State or Tribe for brucellosis if:

(i) The herd from which the cattle or bison originate has been subjected to a herd test using an official test for brucellosis no more than 1 year and no less than 120 days prior to movement, with negative results;

(ii) The cattle or bison are additionally tested using an individual official test no more than 60 days prior to movement, with negative results;

(iii) Since being individually tested, the cattle or bison have not commingled with non-natural additions to the herd that are of unknown brucellosis status or animals that have had a non-negative test for brucellosis;

(iv) The cattle or bison are officially identified; and

(v) The cattle or bison are accompanied by an ICVI documenting the negative test results.

(b) *Cattle or bison that are less than 6 months of age, steers, and spayed heifers.* Sexually intact cattle or bison that are less than 6 months of age, steers, and spayed heifers may be moved interstate from an inconsistent State or Tribe for brucellosis if:

(1) The cattle or bison are officially identified; and

(2) The cattle or bison are accompanied by an ICVI.

§ 76.15 Interstate movement of cattle and bison from inconsistent States or Tribes for bovine tuberculosis.

(a)(1) *Cattle or bison destined for immediate slaughter.* Cattle or bison that are destined for immediate slaughter may only be moved interstate from an inconsistent State or Tribe for bovine tuberculosis, if:

(i) The cattle or bison are officially identified; and

(ii) The cattle or bison are accompanied by an ICVI.

(2) *Cattle or bison not destined for immediate slaughter.* Cattle or bison that are not destined for immediate slaughter may only be moved interstate from an inconsistent State or Tribe for bovine tuberculosis, if:

(i) The cattle or bison originate from a herd that was subjected to a herd test using an official test for bovine tuberculosis no more than 1 year and no less than 120 days prior to the movement of the cattle or bison, with negative results.

(ii) The cattle or bison are additionally tested for bovine tuberculosis using an individual official test no more than 60 days prior to movement, with negative results.

(iii) Since being individually tested, the cattle or bison have not commingled with non-natural additions to the herd that are of unknown bovine tuberculosis status or animals that have had a non-negative test for bovine tuberculosis.

(iv) The cattle or bison are officially identified.

(v) The cattle or bison are accompanied by an ICVI documenting the negative test results.

(b) [Reserved]

Subpart C—Interstate Movement of Captive Cervids

§ 76.16 Interstate movement of captive cervids

Except as provided in §§ 76.8 through 76.10, captive cervids may only be moved interstate in accordance with this section.

(a) *Captive cervids that originate directly from accredited herds.* Captive cervids that originate directly from herds that are currently accredited for both brucellosis and bovine tuberculosis may be moved interstate if:

(1) The cervids are officially identified; and

(2) The cervids are accompanied by an ICVI with a statement that the cervids originate directly from herds that are currently accredited for both brucellosis and bovine tuberculosis.

(b) *All other captive cervids*—(1) *Captive cervids destined for immediate slaughter.* Captive cervids that are destined for immediate slaughter may be moved interstate, provided that:

(i) The cervids are officially identified; and

(ii) The cervids are accompanied by an ICVI.

(2) *Captive cervids not destined for immediate slaughter*—(i) *General conditions.* Captive cervids that are not destined for immediate slaughter may be moved interstate provided that:

(A) The cervids originate from a herd that was subjected to a herd test using an official test for brucellosis and an official test for bovine tuberculosis no more than 1 year and no less than 120 days prior to movement, with negative results; and

(B) The cervids are additionally tested for brucellosis and bovine tuberculosis using an individual official test no more than 60 days prior to movement, with negative results; and

(C) The cervids are officially identified; and

(D) The cervids are accompanied by an ICVI.

(ii) *Additional conditions for captive cervids moved from an inconsistent State or Tribe for brucellosis and/or bovine tuberculosis.* In addition to all general conditions for the interstate movement of captive cervids specified in paragraph (a)(2)(i) of this section, captive cervids that are not destined for immediate slaughter may only be moved interstate from an inconsistent State or Tribe for brucellosis or bovine tuberculosis if, since being individually tested for brucellosis and bovine tuberculosis, the cervids have not commingled with non-natural additions to the herd that are of unknown disease status or animals that have had a non-negative test for brucellosis or bovine tuberculosis.

§ 76.17 Official tests for brucellosis and bovine tuberculosis, official testing laboratories, and official testers.

(a) *Official tests.* All testing for the presence or absence of brucellosis and bovine tuberculosis in animals that is conducted in accordance with this part must be conducted using an official test. A list of all official tests is found on the Internet, at *http://www.aphis.usda.gov/animal_health/animal_dis_spec/cattle.*

(1) If APHIS determines that a test can reliably determine the presence or

absence of brucellosis or bovine tuberculosis in animals, APHIS will add it to the list of official tests. Whenever a test is added to the list, APHIS will publish a notice in the **Federal Register** advising the public of this addition.

(2) If APHIS determines at any point that an official test can no longer be considered to provide reliable results regarding the presence or absence of brucellosis or bovine tuberculosis in animals, APHIS will remove it from the list of official tests. Whenever an official test is removed from the list, APHIS will publish a notice in the **Federal Register** alerting the public to and setting forth the reasons for the removal.

(b) *Official testing laboratories*—(1) *Application for approval.* In order to be considered an official testing laboratory, a Federal, State, or university laboratory, or any other laboratory approved by the National Animal Health Laboratory Network, must submit a written application to its district APHIS Veterinary Services office. A standard format for such an application is found in the Program Standards document.

(2) *Evaluation process.* APHIS will review the submitted application to determine if it is complete. When APHIS determines that the application is complete, it will conduct formal review and evaluation of the application. Evaluation will be based on the following considerations:

(i) Whether a need exists at the national level for an additional laboratory to be authorized by APHIS to conduct official tests for brucellosis and bovine tuberculosis;

(ii) Whether the laboratory has facilities, safety equipment, and standard microbiological practices appropriate for the testing specified on the application;

(iii) Whether the personnel at the laboratory are qualified to conduct the activities specified on the application, as determined by proficiency testing; and

(iv) Whether the individual at the laboratory with oversight of serological testing or final determination of test results has adequate experience in the fields of immunology, microbiology, veterinary medicine, or a similar discipline.

(3) *Approval or denial.* APHIS will communicate its approval or denial of the laboratory's application to the laboratory. If this approval or denial is oral, APHIS will subsequently communicate the approval or denial in writing. If APHIS approves a laboratory, it will be considered an official testing laboratory. An official testing laboratory may conduct official tests using official testers in the manner set forth in its application and approved by APHIS. A list of all official testing laboratories is found on the Internet at [*address to be added in final rule*].

(4) *Maintaining approval.* In order for a laboratory to maintain approval as an official testing laboratory, it must demonstrate, by means of annual proficiency testing, that it continually meets or exceeds the standards under which it was approved.

(5) *Changes to approval.* (i) If circumstances have changed at the laboratory such that the information supplied on its application for approval is no longer accurate, the laboratory must provide updated information to APHIS within 30 days. In response to such notification, APHIS may conduct another evaluation of the facility. Failure by a facility to notify APHIS in a timely manner may result in revocation of its approval.

(ii) A facility may provide additional information to APHIS for evaluation and approval at any point.

(6) *Revocation of approval.* APHIS may revoke the approval of an official testing laboratory if it is determined to have falsified information on its application or to no longer meet the standards under which it was approved. Any laboratory whose approval is revoked may appeal the decision in writing to the Administrator within 14 days after receiving the written notification of the revocation. The appeal must state all of the reasons on which the laboratory relies to show that approval was wrongfully revoked. The Administrator shall grant or deny the appeal, in writing, stating the reasons for the decision as soon as circumstances allow.

(7) *Reapproval.* In order to be reapproved, any laboratory whose approval has been revoked must submit a written justification for reapproval to APHIS to the address specified within the Program Standards document. The justification must demonstrate that the issue that resulted in the revocation has been resolved.

(c) *Official testers outside of a laboratory environment*—(1) *State, Federal, and Tribal animal health and wildlife officials.* At the discretion of a district APHIS Veterinary Services office and a State or Tribal animal health official, regulatory personnel may conduct official tests outside of a laboratory environment and under the conditions specified by the VS office and State or Tribal official.

(2) *Qualified accredited veterinarians.* A qualified accredited veterinarian with a program certification for bovine tuberculosis is authorized to operate as an official tester for bovine tuberculosis outside of a laboratory environment within the State or States in which he or she is accredited.

PART 77—[REMOVED AND RESERVED]

■ 18. Part 77 is removed and reserved.

PART 78—BRUCELLOSIS

■ 19. The authority citation for part 78 continues to read as follows:

Authority: 7 U.S.C. 8301–8317; 7 CFR 2.22, 2.80, and 371.4.

■ 20. Section 78.1 is amended as follows:

■ a. By removing the definitions for *animal identification number, approved brucella vaccine, approved individual herd plan, approved intermediate handling facility, area, ''B'' branded, brucellosis, brucellosis exposed, brucellosis reactor, brucellosis ring test, brucellosis suspect, certified brucellosis-free herd, Class A State or area, Class B State or area, Class C State or area, Class Free State or area, dairy cattle, farm of origin, finished fed cattle, herd blood test, market cattle identification test cattle, official adult vaccinate, official brand inspection certificate, official brand recording agency, official calfhood vaccinate, official eartag, official vaccinate, official vaccination eartag, permit for entry, qualified herd, quarantined area, quarantined feedlot, quarantined pasture, ''S'' branded, ''S'' brand permit, specifically approved stockyard, successfully closed case, test-eligible cattle and bison, United States Department of Agriculture backtag,* and *whole herd vaccination.*

■ b. In the definition of *official test,* by removing and reserving paragraph (a).

■ c. By revising the definitions of *animals, originate,* and *permit.*

The revisions read as follows:

§ 78.1 Definitions.

* * * * *

Animals. Swine.

* * * * *

Originate. (1) Animals will have the status of the herd from which they were moved if:

(i) They were born and maintained in that herd since birth; or

(ii) They have been in the herd for at least 120 days.

(2) Animals will have the status of the State from which they were moved if:

(i) They were born and maintained in the State since birth; or

(ii) They were previously moved from a State of equal or higher class to the State; or

(iii) They were previously moved from a State of lower class to the State

where they are now located and have been in the new State for at least 120 days.

* * * * *

Permit. A document issued by an APHIS representative, State representative, or accredited veterinarian and authorizing the restricted interstate movement of livestock to certain specified destinations.

* * * * *

§ 78.2 [Amended]

■ 21. Section 78.2 is amended as follows:

■ a. In paragraph (a), in the first sentence, by removing the words ''ICVI, permit, or 'S' brand permit'' and adding the words ''ICVI or permit'' in their place.

■ b. In paragraph (b), by removing the words '', except for permits for entry and 'S' brand permits,''.

§ 78.3 [Removed and reserved]

■ 22. Section 78.3 is removed and reserved.

Subpart B—[Removed and reserved]

■ 23. Subpart B, consisting of §§ 78.5 through 78.14, is removed and reserved.

Subpart C—[Removed and reserved]

■ 24. Subpart C, consisting of §§ 78.20 through 78.25, is removed and reserved.

PART 86—ANIMAL DISEASE TRACEABILITY

■ 25. The authority citation for part 86 continues to read as follows:

Authority: 7 U.S.C. 8301–8317; 7 CFR 2.22, 2.80, and 371.4.

§ 86.4 [Amended]

■ 26. Section 86.4 is amended as follows:

■ a. In paragraph (a)(6), by removing the words ''part 77'' and adding the words ''part 76'' in their place.

■ b. In paragraph (b)(6), by removing the words ''part 77'' and adding the words ''part 76'' in their place.

■ c. In paragraph (c)(4), by removing the words ''part 78'' and adding the words ''part 76'' in their place.

§ 86.5 [Amended]

■ 27. In § 86.5, paragraph (h) is amended as by removing the words ''part 77'' and adding the words ''part 76'' in their place.

PART 93—IMPORTATION OF CERTAIN ANIMALS, BIRDS, FISH, AND POULTRY, AND CERTAIN ANIMAL, BIRD, AND POULTRY PRODUCTS; REQUIREMENTS FOR MEANS OF CONVEYANCE AND SHIPPING CONTAINERS

■ 28. The authority citation for part 93 continues to read as follows:

Authority: 7 U.S.C. 1622 and 8301–8317; 21 U.S.C. 136 and 136a; 31 U.S.C. 9701; 7 CFR 2.22, 2.80, and 371.4.

■ 29. Section 93.400 is amended as follows:

■ a. By removing the definitions of *brucellosis certified-free province or territory of Canada, official tuberculin test, tuberculosis-free herd,* and *whole herd test.*

■ b. By revising the definition of *herd of origin.*

■ c. By adding, in alphabetical order, definitions for *accredited herd for brucellosis, accredited herd for tuberculosis, brucellosis, import protocol, individual test, non-negative test results, notifiable disease, spayed heifer, steer, tuberculosis, whole herd test for brucellosis,* and *whole herd test for tuberculosis.*

The additions and revision read as follows:

§ 93.400 Definitions.

* * * * *

Accredited herd for brucellosis. A herd that meets APHIS' standards for accreditation for brucellosis status. Standards for accreditation are specified in import protocols.

Accredited herd for tuberculosis. A herd that meets APHIS' standards for accreditation for bovine tuberculosis status. Standards for accreditation are specified in import protocols.

* * * * *

Brucellosis. Infection with or disease caused by *Brucella abortus.*

* * * * *

Herd of origin.

(1) The herd within which an individual animal was born and raised; or

(2) Any herd in which an individual animal has been continually maintained for at least 4 months prior to shipment to the United States.

* * * * *

Import protocol. A document issued by APHIS and provided to officials of the competent veterinary authority of an exporting region that specifies in detail the mitigation measures that will comply with the regulations in 9 CFR part 93 regarding the import of certain animals or commodities.

Individual test. A test for brucellosis or tuberculosis that is approved by the Administrator and that is administered individually in accordance with this part to ruminants that are susceptible to brucellosis or tuberculosis. For purposes of this part, testing of individual animals as part of a whole herd test does not constitute an individual test.

* * * * *

Non-negative test results. Any test results for tuberculosis or brucellosis within the suspect or positive range parameters of a pathogen assay that has been approved by the Administrator.

* * * * *

Notifiable disease. A disease for which confirmed or suspected occurrences within a region must be reported to the competent veterinary authority or other competent authority of that region.

* * * * *

Spayed heifer. A female bovine that has been neutered in a manner otherwise approved by the Administrator and specified in an import protocol.

* * * * *

Steer. A sexually neutered male bovine.

* * * * *

Tuberculosis. Infection with or disease caused by *Mycobacterium bovis.*

* * * * *

Whole herd test for brucellosis. A brucellosis test that has been approved by APHIS of all bovines in a herd of origin that are 6 months of age or older, and of all bovines in the herd of origin that are less than 6 months of age and were not born into the herd of origin, except those bovines that are less than 6 months of age and originate directly from a currently accredited herd for brucellosis.

Whole herd test for tuberculosis. A tuberculosis test that has been approved by APHIS of all bovines in a herd of origin that are 6 months of age or older, and of all bovines in the herd of origin that are less than 6 months of age and were not born into the herd of origin, except those bovines that are less than 6 months of age and originate directly from a currently accredited herd for tuberculosis.

* * * * *

■ 30. Section 93.401 is amended by adding paragraph (d) to read as follows:

§ 93.401 General prohibitions; exceptions.

* * * * *

(d) *Cleaning and disinfection prior to shipment.* Unless a means of conveyance was cleaned and disinfected in a manner specified within an import protocol prior to being used to transport an animal for importation in accordance

with this subpart, or unless an exemption has been granted by the Administrator, the transport of the animal to the United States in that means of conveyance is prohibited.

§ 93.406 [Amended]

■ 31. Section 93.406 is amended by removing and reserving paragraphs (a), (c), and (d).

§ 93.408 [Amended]

■ 32. In § 93.408, the first sentence is amended by removing the words ''§§ 93.421 and 93.426'' and adding in their place ''§ 93.421''.

§ 93.418 [Amended]

■ 33. Section 93.418 is amended as follows:

■ a. By removing and reserving paragraphs (b) and (c).

■ b. In paragraph (d), introductory text, by removing the words ''the requirements of paragraphs (a) through (c)'' and adding the words ''the other requirements'' in their place.

§ 93.423 [Amended]

■ 34. In § 93.423, the first sentence in paragraph (a) is amended by removing the words ''Ruminants intended for'' and adding the words ''In addition to all other applicable requirements of the regulations in this part, ruminants intended for'' in their place.

■ 35. In § 93.424, paragraph (b) is revised to read as follows:

§ 93.424 Import permits and applications for inspection of ruminants.

* * * * *

(b) For ruminants intended for importation into the United States from Mexico, the importer or his or her agent shall deliver to the veterinary inspector at the port of entry an application, in writing, for inspection, so that the veterinary inspector and customs representatives may make mutual satisfactory arrangements for the orderly inspection of the animals. The veterinary inspector at the port of entry will provide the importer or his or her agent with a written statement assigning a date when the animals may be presented for import inspection.

■ 36. Section 93.427 is amended as follows:

■ a. By revising paragraph (a).

■ b. By removing and reserving paragraphs (c) and (d).

The revision reads as follows:

§ 93.427 Cattle from Mexico.

(a) Cattle from Mexico, except animals being transported in bond for immediate return to Mexico or animals imported for immediate slaughter, may be detained at the port of entry, and there subjected to such disinfection, blood tests, other tests, and dipping as required in this part to determine their freedom from any communicable disease or infection of such disease. The importer shall be responsible for the care, feed, and handling of the animals during the period of detention. In addition, all steers from Mexico that arrive at a port of entry into the United States, except animals being transported in bond for immediate return to Mexico or animals imported for immediate slaughter, must be identified on the right hip with a distinct, permanent, and legible ''M'' mark applied with a freeze brand, hot iron, or other method approved by APHIS, and all spayed heifers from Mexico that arrive at a port of entry into the United States, except animals being transported in bond for immediate return to Mexico or animals imported for immediate slaughter, must be identified on the right hip with a distinct, permanent, and legible ''M_X'' mark applied with a freeze brand, hot iron, or other method approved by APHIS.

* * * * *

■ 37. Section 93.429 is revised to read as follows:

§ 93.429 Ruminants for immediate slaughter.

Ruminants, other than bovines, sheep, and goats, may be imported from Mexico subject to the applicable provisions of §§ 93.424, 93.425, and 93.426 for immediate slaughter if accompanied by a certificate issued in accordance with § 93.405(a) and stating that the veterinarian who issued the certificate has inspected the animals in the herd from which the ruminants will be imported and found them free of evidence of communicable disease, and that, so far as it has been possible to determine, they have not been exposed to any such disease common to animals of their kind during the preceding 60 days, and if the ruminants are shipped by rail or truck, the certificate shall further specify that the ruminants were loaded into cleaned and disinfected cars or trucks for transportation directly to the port of entry. Such ruminants shall be moved from the port of entry in conveyances sealed with seals of the United States Government. Bovines, sheep, and goats, may be imported only in compliance with other applicable sections in this part.

§ 93.432 [Removed and reserved]

■ 38. Section 93.432 is removed and reserved.

■ 39. Section 93.437 is added to subpart D to read as follows:

§ 93.437 Tuberculosis status of foreign regions.

(a) *Level I regions.* APHIS considers certain regions of the world to have a program that meets APHIS requirements for tuberculosis classification in accordance with § 93.438, and a prevalence of tuberculosis in their domestic bovine herds of less than 0.001 percent over at least the previous 2 years (24 consecutive months).

(b) *Level II regions.* APHIS considers certain regions of the world to have a program that meets APHIS requirements for tuberculosis classification in accordance with § 93.438, and a prevalence of tuberculosis in their domestic bovine herds equal to or greater than 0.001 percent, but less than 0.01 percent, over the previous 2 years (24 consecutive months).

(c) *Level III regions.* APHIS considers certain regions of the world to have a program that meets APHIS requirements for tuberculosis classification in accordance with § 93.438, and a prevalence of tuberculosis in their domestic bovine herds equal to or greater than 0.01 percent, but less than 0.1 percent, over the previous year (12 consecutive months).

(d) *Level IV regions.* APHIS considers certain regions of the world to have a program that meets APHIS requirements for tuberculosis classification in accordance with § 93.438, and a prevalence of tuberculosis in their domestic bovine herds equal to or greater than 0.1 percent, but less than 0.5 percent, over the previous year (12 consecutive months).

(e) *Level V regions.* APHIS considers certain regions of the world not to have a program that meets APHIS requirements for tuberculosis classification in accordance with § 93.438, to have a prevalence of tuberculosis in their domestic bovine herds equal to or greater than 0.5 percent, or to be unassessed by APHIS with regard to tuberculosis prevalence.

(f) *Listing of regions.* Lists of all Level I regions, Level II regions, Level III regions, Level IV, and Level V regions for tuberculosis are found online, at *http://www.aphis.usda.gov/import_export/animals/live_animals.shtml.* Changes to the lists will be made in accordance with § 93.438.

■ 40. Section 93.438 is added to subpart D to read as follows:

§ 93.438 Process for requesting regional classification for tuberculosis.

(a) *Request for regional classification; requirements.* A representative of the competent veterinary authority of any country or countries may request that APHIS classify a region for tuberculosis.

Requests for classification or reclassification must be submitted to APHIS electronically or through the mail as provided at *http://www.aphis.usda.gov/import_export/animals/live_animals.shtml.* Guidance regarding how to complete a request in a manner that will allow APHIS to review it expeditiously is available at *http://www.aphis.usda.gov/import_export/animals/reg_request.shtml,* and may also be obtained by contacting the National Director, Regionalization Evaluation Services, National Import Export Services, VS, APHIS, 4700 River Road Unit 38, Riverdale, MD 20737. At a minimum, in order for APHIS to consider the request complete, it must define the boundaries of the region, specify the prevalence level for tuberculosis within the region, and demonstrate the following:

(1) That there is effective veterinary control and oversight within the region;

(2) That tuberculosis is a notifiable disease within the region; and

(3) That the region has a program in place for tuberculosis that includes, at a minimum:

(i) Epidemiological investigations following the discovery of any infected animals or affected herds, or any animals or herds that have had non-negative test results following a test for tuberculosis, and documentation of these investigations;

(ii) Management of affected herds in a manner designed to eradicate tuberculosis from those herds, and documentation regarding this management;

(iii) Regulatory controls on the movement of livestock into, within, and from the region that correspond to the risk of dissemination of tuberculosis associated with such movement; and

(iv) Access to, oversight of, and quality controls for diagnostic testing for tuberculosis within the region.

(4) That the region has surveillance in place that is equivalent to or exceeds Federal standards for surveillance within the United States.

(b) *APHIS evaluation.* If APHIS considers the request complete, APHIS will publish a notice in the **Federal Register** proposing to classify the region according to § 93.437, and making available to the public the information upon which this proposed classification is based. The notice will request public comment.

(c) *APHIS determination.* (1) If no comments are received on the notice, or if comments are received but do not affect APHIS' proposed classification, APHIS will publish a subsequent notice in the **Federal Register** announcing that classification to be final and adding the region to the appropriate list on the Internet.

(2) If comments received on the notice suggest that the region be classified according to a different tuberculosis classification, and APHIS agrees with the comments, APHIS will publish a subsequent notice in the **Federal Register** making the information supplied by commenters available to the public, and proposing to classify the region according to this different classification. The notice will request public comment.

(3) If comments received on the notice suggest that insufficient information was supplied on which to base a tuberculosis classification, and APHIS agrees with the comments, APHIS will publish a subsequent notice in the **Federal Register** specifying the additional information needed before APHIS can classify the region.

(d) *Maintaining classification and reclassification initiated by APHIS.* If a region is classified under the provisions of this section, that region may be required to submit additional information or allow APHIS to conduct additional information collection activities in order for that region to maintain its classification. Moreover, if APHIS determines that a region's classification for tuberculosis is no longer accurate, APHIS will publish a notice in the **Federal Register** announcing the revised classification and setting forth the reasons for this reclassification.

■ 41. Section 93.439 is added to subpart D to read as follows:

§ 93.439 Importation of ruminants from certain regions of the world; tuberculosis.

(a) *Importation of certain ruminants prohibited.* Notwithstanding any other provisions of this section, ruminants that are known to be infected with or exposed to tuberculosis and ruminants that have had a non-negative response to any test for tuberculosis are prohibited importation into the United States.

(b) *Importation of bovines from Level I regions.* Unless specified otherwise by the Administrator, bovines may be imported into the United States from a Level I region for tuberculosis without further restriction under this section.[11]

(c) *Importation of bovines for immediate slaughter from Level II, III, or IV regions.* Bovines may be imported into the United States for immediate slaughter from a Level II, III, or IV region for tuberculosis provided that:

(1) The bovines are officially identified; and

(2) The bovines are accompanied by a certificate, issued in accordance with § 93.405(a), with an additional statement that the bovines are officially identified.

(d) *Importation of other bovines from a Level II region*—(1) *Bovines directly from currently accredited herds for tuberculosis.* Bovines may be imported into the United States for purposes other than immediate slaughter directly from a currently accredited herd for tuberculosis in a Level II region for tuberculosis, provided that:

(i) The bovines are officially identified; and

(ii) The bovines are accompanied by a certificate, issued in accordance with § 93.405(a), with an additional statement that the bovines are officially identified and originate directly from a currently accredited herd for tuberculosis.

(2) *Sexually intact bovines that do not originate directly from a currently accredited herd for tuberculosis.* Sexually intact bovines that do not originate directly from a currently accredited herd for tuberculosis may be imported into the United States from a Level II region for tuberculosis for purposes other than immediate slaughter provided that:

(i) If the bovines are 6 months of age or older, the bovines are subjected to an individual test for tuberculosis at the port of entry into the United States or during post-arrival quarantine in accordance with § 93.411, with negative results; and

(ii) The bovines are officially identified; and

(iii) The bovines are accompanied by a certificate, issued in accordance with § 93.405(a), with an additional statement that the animals are officially identified.

(3) *Steers or spayed heifers that do not originate directly from a currently accredited herd for tuberculosis.* Steers or spayed heifers that do not originate directly from a currently accredited herd for tuberculosis may be imported into the United States from a Level II region for tuberculosis for purposes other than immediate slaughter provided that:

(i) The steers or spayed heifers are officially identified; and

(ii) The steers or spayed heifers are accompanied by a certificate, issued in accordance with § 93.405(a), with an additional statement that the steers or spayed heifers are officially identified.

(e) *Importation of other bovines from a Level III region*—(1) *Bovines directly from currently accredited herds for*

[11] The importation of such bovines, as well as that of all other bovines covered by this section, is still subject to all other relevant restrictions of this part.

tuberculosis. Bovines may be imported into the United States for purposes other than immediate slaughter directly from a currently accredited herd for tuberculosis in a Level III region for tuberculosis, provided that:

(i) The bovines are officially identified; and

(ii) The bovines are accompanied by a certificate, issued in accordance with § 93.405(a), with an additional statement that the bovines are officially identified and originate directly from a currently accredited herd for tuberculosis.

(2) *Sexually intact bovines that do not originate directly from a currently accredited herd for tuberculosis.* Sexually intact bovines that do not originate directly from a currently accredited herd for tuberculosis may be imported into the United States from a Level III region for tuberculosis for purposes other than immediate slaughter, provided that:

(i) The bovines originate from a herd that was subjected to a whole herd test for tuberculosis on its premises of origin no more than 1 year prior to the export of the bovines to the United States, with negative results; and

(ii) If the bovines are 2 months of age or older, the bovines are subjected to an additional individual test for tuberculosis on the premises of origin no more than 60 days prior to export of the bovines to the United States, with negative results, except that this additional test is not required if the bovines are exported within 60 days of the whole herd test and were included in that test; and

(iii) The bovines are officially identified; and

(iv) The bovines are accompanied by a certificate, issued in accordance with § 93.405(a), with an additional statement that the animals meet the conditions for importation in paragraphs (e)(2)(i) through (iii) of this section.

(3) *Steers or spayed heifers that do not originate directly from a currently accredited herd for tuberculosis.* Steers or spayed heifers that do not originate directly from a currently accredited herd for tuberculosis may be imported into the United States from a Level III region for tuberculosis for purposes other than immediate slaughter provided that:

(i) If the steers or spayed heifers are 6 months of age or older, the steers or spayed heifers are subjected to an individual test for tuberculosis on the premises of origin no more than 60 days prior to export of the bovines to the United States, with negative results; and

(ii) The steers or spayed heifers are officially identified; and

(iii) The steers or spayed heifers are accompanied by a certificate, issued in accordance with § 93.405(a), with an additional statement that the animals meet the conditions for importation in this paragraph (e)(3).

(f) *Importation of other bovines from a Level IV region*—(1) *Bovines directly from currently accredited herds for tuberculosis.* Bovines may be imported into the United States for purposes other than immediate slaughter directly from a currently accredited herd for tuberculosis in a Level IV region for tuberculosis, provided that:

(i) The bovines are subjected to an individual test for tuberculosis at the port of entry into the United States or during post-arrival quarantine in accordance with § 93.411, with negative results; and

(ii) The bovines are officially identified; and

(iii) The bovines are accompanied by a certificate, issued in accordance with § 93.405(a), with an additional statement that the bovines are officially identified and originate directly from a currently accredited herd for tuberculosis.

(2) *Sexually intact bovines that do not originate directly from a currently accredited herd for tuberculosis.* Sexually intact bovines that do not originate directly from a currently accredited herd for tuberculosis may be imported into the United States from a Level IV region for tuberculosis for purposes other than immediate slaughter, provided that:

(i) The bovines originate from a herd that was subjected to two whole herd tests for tuberculosis on its premises of origin and conducted no less than 9 months and no more than 15 months apart, with the second whole herd test conducted no less than 60 days prior the export of the bovines to the United States, with negative results each time; and

(ii) If the bovines are 2 months of age or older, the bovines are subjected to an additional individual test for tuberculosis at the port of entry into the United States or during post-arrival quarantine in accordance with § 93.411, with negative results; and

(iii) The bovines are officially identified; and

(iv) The bovines are accompanied by a certificate, issued in accordance with § 93.405(a), with an additional statement that the bovines meet the requirements in paragraphs (f)(2)(i) and (iii) of this section.

(3) *Steers or spayed heifers that do not originate directly from a currently accredited herd for tuberculosis.* Steers or spayed heifers that do not originate directly from a currently accredited herd for tuberculosis may be imported into the United States from a Level IV region for tuberculosis for purposes other than immediate slaughter provided that:

(i) The bovines originate from a herd that was subjected to a whole herd test for tuberculosis on its premises of origin no more than 1 year prior to the export of the bovines, with negative results; and

(ii) If the bovines are 2 months of age or older, the bovines are subjected to an additional individual test for tuberculosis on the premises of origin no more than 60 days prior to export of the bovines to the United States, with negative results, except that this additional test is not required if the bovines are exported within 60 days of the whole herd test and were included in that test; and

(iii) The bovines are officially identified; and

(iv) The bovines are accompanied by a certificate, issued in accordance with § 93.405(a), with an additional statement that the bovines meet the requirements in this paragraph (f)(3).

(g) *Importation of bovines from a Level V region.* Bovines may be imported from a Level V region for tuberculosis, provided that:

(1) APHIS and the importer have entered into a Cooperative and Trust Fund Agreement, and the importer has deposited funds with APHIS in an amount determined by APHIS to cover all costs incurred by APHIS in providing services in accordance with the Cooperative and Trust Fund Agreement; and

(2) The bovines originate from a herd that was subjected to two whole herd tests for tuberculosis on its premises of origin and conducted no less than 9 months and no more than 15 months apart, with at least the second whole herd test administered by an APHIS veterinarian and conducted no less than 60 days prior to export, with negative results; and

(3) The bovines are subjected to an additional individual test for tuberculosis at the port of entry into the United States or during post-arrival quarantine in accordance with § 93.411, with negative results; and

(4) The bovines are officially identified; and

(5) The bovines are accompanied by a certificate, issued in accordance with § 93.405(a), with an additional statement that bovines meet the requirements in paragraphs (g)(1), (2), and (4) of this section.

■ 42. Section 93.440 is added to subpart D to read as follows:

§ 93.440 Brucellosis status of foreign regions.

(a) *Level I regions.* APHIS considers certain regions of the world to have a program that meets APHIS requirements for brucellosis classification in accordance with § 93.441, and a prevalence of brucellosis in their domestic bovine herds of less than 0.001 percent over at least the previous 2 years (24 consecutive months).

(b) *Level II regions.* APHIS considers certain regions of the world to have a program that meets APHIS requirements for brucellosis classification in accordance with § 93.441, and a prevalence of brucellosis in their domestic bovine herds equal to or greater than 0.001 percent, but less than 0.01 percent over at least the previous 2 years (24 consecutive months).

(c) *Level III regions.* APHIS considers certain regions of the world not to have a program that meets APHIS requirements for brucellosis classification in accordance with § 93.441, to have a herd prevalence equal to or greater than 0.01 percent, or to be unassessed by APHIS with regard to brucellosis prevalence.

(d) *Listing of regions.* Lists of all Level I, Level II, and Level III regions for brucellosis are found online, at *http://www.aphis.usda.gov/import_export/animals/live_animals.shtml.* Changes to the lists will be made in accordance with § 93.441.

■ 43. Section 93.441 is added to subpart D to read as follows:

§ 93.441 Process for requesting regional classification for brucellosis.

(a) *Request for regional classification; requirements.* A representative of the competent veterinary authority of any country or countries may request that APHIS classify a region for brucellosis. Requests for classification or reclassification must be submitted to APHIS electronically or through the mail as provided at *http://www.aphis.usda.gov/import_export/animals/live_animals.shtml.* Guidance regarding how to complete a request in a manner that will allow APHIS to review it expeditiously is available at *http://www.aphis.usda.gov/import_export/animals/reg_request.shtml,* and may also be obtained by contacting the National Director, Regionalization Evaluation Services, National Import Export Services, VS, APHIS, 4700 River Road Unit 38, Riverdale, MD, 20737. At a minimum, in order for APHIS to consider the request complete, it must define the boundaries of the region, specify the prevalence level for brucellosis within the region, and demonstrate the following:

(1) That there is effective veterinary control and oversight within the region;

(2) That brucellosis is a notifiable disease within the region; and

(3) That the region has a program for brucellosis in place that includes, at a minimum:

(i) Epidemiological investigations following the discovery of any infected animals or affected herds, or any animals or herds that have had non-negative test results following a test for brucellosis, and documentation of these investigations;

(ii) Management of affected herds in a manner designed to eradicate brucellosis from those herds, and documentation regarding this management;

(iii) Regulatory controls on the movement of livestock into, within, and from the region that correspond to the risk of dissemination of brucellosis associated with such movement; and

(iv) Access to, oversight of, and quality controls on diagnostic testing for brucellosis within the region.

(4) That the region has surveillance in place that is equivalent to or exceeds Federal standards for brucellosis surveillance within the United States; and

(5) That, if the region vaccinates for brucellosis, it is in a manner that has been approved by APHIS.

(b) *APHIS evaluation.* If APHIS considers the request complete, APHIS will publish a notice in the **Federal Register** proposing to classify the region according to § 93.440, and making available to the public the information upon which this proposed classification is based. The notice will request public comment.

(c) *APHIS determination.* (1) If no comments are received on the notice, or if comments are received but do not affect APHIS' proposed classification, APHIS will publish a subsequent notice in the **Federal Register** announcing that classification to be final and adding the region to the appropriate list on the Internet.

(2) If comments received on the notice suggest that the region be classified according to a different brucellosis classification, and APHIS agrees with the comments, APHIS will publish a subsequent notice in the **Federal Register** making the information supplied by commenters available to the public, and proposing to classify the region according to this different classification. The notice will request public comment.

(3) If comments received on the notice suggest that insufficient information was supplied on which to base a brucellosis classification, and APHIS agrees with the comments, APHIS will publish a subsequent notice in the **Federal Register** specifying the additional information needed before APHIS can classify the region.

(d) *Maintaining classification and reclassification initiated by APHIS.* If a region is classified under the provisions of this section, that region may be required to submit additional information or allow APHIS to conduct additional information collection activities in order for that region to maintain its classification. Moreover, if APHIS determines that a region's classification for brucellosis is no longer accurate, APHIS will publish a notice in the **Federal Register** announcing the revised classification and setting forth the reasons for this reclassification.

■ 44. Section 93.442 is added to subpart D to read as follows:

§ 93.442 Importation of ruminants from certain regions of the world; brucellosis.

(a) *Importation of certain ruminants prohibited.* Notwithstanding any other provisions of this section, ruminants that are known to be infected with or exposed to brucellosis and ruminants that have had a non-negative response to any test for *Brucella* spp. are prohibited importation into the United States.

(b) *Importation of bovines from Level I regions.* Unless specified otherwise by the Administrator, bovines may be imported into the United States from a Level I region for brucellosis without further restriction under this section.[12]

(c) *Bovines for slaughter.* Bovines may be imported for slaughter from a Level II or Level III region for brucellosis provided that:

(1) The bovines are officially identified; and

(2) The bovines are accompanied by a certificate, issued in accordance with § 93.405(a), with an additional statement that the bovines are officially identified.

(d) *Importation of other bovines from a Level II region for purposes other than immediate slaughter*—(1) *Bovines directly from currently accredited herds for brucellosis.* Bovines may be imported into the United States for purposes other than immediate slaughter from a currently accredited herd for brucellosis in a Level II region for brucellosis, provided that:

[12] The importation of such bovines, as well as that of all other bovines covered by this section, is still subject to all other relevant restrictions of this chapter.

(i) The bovines are officially identified; and

(ii) The bovines are accompanied by a certificate, issued in accordance with § 93.405(a), with an additional statement that the bovines are officially identified and originate directly from a currently accredited herd for brucellosis.

(2) *Sexually intact bovines that do not originate directly from a currently accredited herd for brucellosis.* Sexually intact bovines that do not originate directly from a currently accredited herd for brucellosis may be imported into the United States from a Level II region for brucellosis for purposes other than immediate slaughter, provided that:

(i) The bovines originate from a herd that was subjected to a whole herd test for brucellosis on its premises of origin no more than 90 days and no less than 30 days prior to the export of the bovines to the United States, with negative results; and

(ii) If the bovines are 6 months of age or older, the bovines are subjected to an additional individual test for brucellosis at the port of entry into the United States or during post-arrival quarantine in accordance with § 93.411, with negative results; and

(iii) The bovines are officially identified; and

(iv) The bovines are accompanied by a certificate, issued in accordance with § 93.405(a), with an additional statement that the bovines meet the requirements in paragraphs (d)(2)(i) and (iii) of this section.

(3) *Steers and spayed heifers that do not originate directly from a currently accredited herd for brucellosis.* Steers or spayed heifers that do not originate directly from a currently accredited herd for brucellosis may be imported into the United States from a Level II region for brucellosis for purposes other than immediate slaughter, provided that:

(i) The steers or spayed heifers are officially identified; and

(ii) The steers or spayed heifers are accompanied by a certificate, issued in accordance with § 93.405(a), with an additional statement that the steers or spayed heifers are officially identified.

(e) *Importation of other bovines from a Level III region for purposes other than immediate slaughter*—(1) *Bovines directly from currently accredited herds for brucellosis.* Bovines may be imported into the United States for purposes other than immediate slaughter from a currently accredited herd for brucellosis in a Level III region for brucellosis, provided that:

(i) If sexually intact, the bovines are subjected to an individual test for brucellosis at the port of entry into the United States or during post-arrival quarantine in accordance with § 93.411, with negative results; and

(ii) The bovines are officially identified; and

(iii) The bovines are accompanied by a certificate, issued in accordance with § 93.405(a), with an additional statement that the bovines are officially identified and originate directly from a currently accredited herd for brucellosis.

(2) *Sexually intact bovines that do not originate directly from a currently accredited herd for brucellosis.* Sexually intact bovines that do not originate directly from a currently accredited herd for brucellosis may be imported into the United States from a Level III region for brucellosis for purposes other than immediate slaughter, provided that:

(i) The bovines originate from a herd that was subjected to two whole herd tests for brucellosis on its premises of origin, with the second test taking place no more than 90 days and no less than 30 days prior to the export of the bovines to the United States, with negative results each time; and

(ii) If the bovines are 6 months of age or older, the bovines are subjected to an additional individual test for brucellosis at the port of entry into the United States or during post-arrival quarantine in accordance with § 93.411; and

(iii) The bovines are officially identified; and

(iv) The bovines are accompanied by a certificate, issued in accordance with § 93.405(a), with an additional statement that the bovines meet the requirements in paragraphs (e)(2)(i) and (iii) of this section.

(3) *Steers and spayed heifers that do not originate directly from a currently accredited herd for brucellosis.* Steers or spayed heifers that do not originate directly from a currently accredited herd for brucellosis may be imported into the United States from a Level III region for brucellosis for purposes other than immediate slaughter, provided that:

(i) The steers or spayed heifers are officially identified; and

(ii) The steers or spayed heifers are accompanied by a certificate, issued in accordance with § 93.405(a), with an additional statement that the steers or spayed heifers are officially identified.

PART 161—REQUIREMENTS AND STANDARDS FOR ACCREDITED VETERINARIANS AND SUSPENSION OR REVOCATION OF SUCH ACCREDITATION

■ 45. The authority citation for part 161 continues to read as follows:

Authority: 7 U.S.C. 8301–8317; 15 U.S.C. 1828; 7 CFR 2.22, 2.80, and 371.4.

■ 46. Section 161.5 is amended by removing the last two sentences of the section and adding five new sentences in their place to read as follows:

§ 161.5 Program certifications.

* * * A QAV will be accredited to perform those specific accredited duties related to the program certification he or she has been granted; accredited veterinarians not granted a program certification will not be permitted to perform accredited duties related to that particular program certification. In order to retain a program certification, a QAV must meet standards set forth by APHIS regarding performance of accredited duties identified for that certification. APHIS may decertify a QAV for a specific program certification if that QAV does not perform accredited duties in accordance with that program certification standard. APHIS may also suspend or revoke the accreditation of the QAV, if warranted. Finally, if a QAV allows his or her Category II accreditation to expire, the QAV's program certification expires as well, and the QAV must be qualified for the program certification again in accordance with this section.

Done in Washington, DC, this 9th day of December 2015.

Edward Avalos,

Under Secretary for Marketing and Regulatory Programs.

[FR Doc. 2015–31510 Filed 12–15–15; 8:45 am]

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Part V

Department of Transportation

National Highway Traffic Safety Administration

New Car Assessment Program; Notice

DEPARTMENT OF TRANSPORTATION

National Highway Traffic Safety Administration

[Docket No. NHTSA–2015–0119]

New Car Assessment Program

AGENCY: National Highway Traffic Safety Administration (NHTSA), Department of Transportation (DOT).

ACTION: Request for comments.

SUMMARY: NHTSA's New Car Assessment Program (NCAP) provides comparative information on the safety of new vehicles to assist consumers with vehicle purchasing decisions and encourage motor vehicle manufacturers to make vehicle safety improvements. To keep pace with advancements in occupant protection and the introduction of advanced technologies, NHTSA has periodically updated the program. This notice describes and seeks comments on NHTSA's plan to advance the capabilities and safety outcomes of NCAP.

DATES: Comments should be submitted no later than February 16, 2016.

ADDRESSES: Comments should refer to the docket number above and be submitted by one of the following methods:

- *Federal Rulemaking Portal: www.regulations.gov*. Follow the online instructions for submitting comments.
- *Mail:* Docket Management Facility, U.S. Department of Transportation, 1200 New Jersey Avenue SE., West Building Ground Floor, Room W12–140, Washington, DC 20590–0001.
- *Hand Delivery:* 1200 New Jersey Avenue SE., West Building Ground Floor, Room W12–140, Washington, DC, between 9 a.m. and 5 p.m. EST, Monday through Friday, except Federal holidays.
- *Instructions:* For detailed instructions on submitting comments see the Public Participation heading of the **SUPPLEMENTARY INFORMATION** section of this document. Note that all comments received will be posted without change to *www.regulations.gov*, including any personal information provided.
- *Privacy Act:* Anyone is able to search the electronic form of all comments received into any of our dockets by the name of the individual submitting the comment (or signing the comment, if submitted on behalf of an association, business, labor union, etc.). You may review DOT's complete Privacy Act Statement in the **Federal Register** published on April 11, 2000 (65 FR 19477). For access to the docket to read background documents or comments received, go to *www.regulations.gov* or the street address listed above. Follow the online instructions for accessing the dockets.

FOR FURTHER INFORMATION CONTACT: For crashworthiness issues, you may contact Jennifer N. Dang, Division Chief, New Car Assessment Program, Office of Crashworthiness Standards (Telephone: 202–366–1810). For crash avoidance and advanced technology issues, you may contact Clarke B. Harper, Crash Avoidance NCAP Manager, Office of Crash Avoidance Standards (Telephone: 202–366–1810). For legal issues, you may contact Stephen P. Wood, Office of Chief Counsel (Telephone: 202–366–2992). You may send mail to any of these officials at the National Highway Traffic Safety Administration, 1200 New Jersey Avenue SE., West Building, Washington, DC 20590–0001.

SUPPLEMENTARY INFORMATION:

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I. Executive Summary

This notice announces the National Highway Traffic Safety Administration's (NHTSA) plans to update the New Car Assessment Program (NCAP). When NCAP first began providing consumers

with vehicle safety information derived from frontal crashworthiness testing in 1978, consumer interest in vehicle safety and manufacturers' attention to enhanced vehicle safety features were relatively new, and there were 50,133 motor vehicle related deaths. Today, consumers are more educated about vehicle safety as it has become one of the key factors in their vehicle purchasing decisions. Vehicle manufacturers have responded by offering safer vehicles and incorporating enhanced safety features. All of this has translated into improved vehicle safety performance and higher NCAP star ratings. These successes have contributed to the recent historic reductions in motor vehicle fatalities (32,719 in 2013).

While NHTSA's NCAP has raised consumer awareness of vehicle safety and incentivized the production of safer vehicles, thousands of lives continue to be lost every year in motor vehicle crashes.

This notice announces the beginning of a process NHTSA believes will provide the agency with significantly enhanced tools and techniques for better evaluating the safety of vehicles, generating star ratings, and stimulating the development of even safer vehicles for American consumers, which the agency believes will result in even lower numbers of deaths and injuries resulting from motor vehicle crashes. These include:

- A new frontal oblique test to address a crash type that continues to result in deaths and serious injuries despite the use of seat belts, air bags, and the crashworthy structures of late-model vehicles;
- Use of the THOR 50th percentile male (THOR–50M) anthropomorphic test device (ATD—*i.e.* crash test dummy) in the frontal oblique and full frontal tests because of its advanced instrumentation and more human-like (biofidelic) response to the forces experienced in these crashes;
- Use of the WorldSID 50th percentile male ATD (WorldSID–50M) in both side pole and side moveable deformable barrier (MDB) tests because of its advanced instrumentation and enhanced biofidelic (human-like) properties;
- Pedestrian crashworthiness testing to measure the extent to which vehicles are designed to minimize injuries and fatalities to pedestrians struck by vehicles;
- An update of the rollover static stability factor (SSF) risk curve using only crash data from newer electronic stability control (ESC) equipped vehicles;
- The addition of a crash avoidance rating based on whether a vehicle offers any of the multiple technologies that will be added to NCAP and whether the technologies meet NHTSA performance measures;
- These technologies would include forward collision warning, lane departure warning, blind spot detection, lower beam headlighting technologies, semi-automatic headlamp beam switching, amber rear turn signal lamps, rear automatic braking and pedestrian automatic emergency braking. (A decision concerning the addition of crash imminent braking and dynamic brake support to the technologies recommended by NCAP is the subject of a separate proceeding recently published.[1])
- A new approach to determining a vehicle's overall 5-star rating that will, for the first time, incorporate advanced crash avoidance technology features, along with ratings for crashworthiness and pedestrian protection.

This notice describes the agency's plans for implementing the new tools and approaches referenced above. NHTSA intends to implement these enhancements in NCAP in 2018 beginning with the 2019 model year (MY). The agency encourages all interested parties to provide the agency with comprehensive comments.

As part of its efforts to support this NCAP upgrade, the agency will be completing additional technical work. The results of these efforts will be placed in the Docket as they are completed. Accordingly, we recommend that interested people periodically check the Docket for new material.

II. Background

In 2013, 32,719 people died on U.S. roads. In addition, 2,313,000 more were injured. The National Highway Traffic Safety Administration's (NHTSA) mission is to save lives, prevent injuries and reduce vehicle-related crashes.

The agency uses several approaches to carry out its mission including regulations, defect investigations and recalls, and education programs. The New Car Assessment Program (NCAP) is a consumer education approach that the agency uses to help accomplish its safety mission. NCAP provides comparative information on the safety performance and features of new vehicles to: (1) Assist consumers with their vehicle purchasing decisions, (2) encourage manufacturers to improve the current safety performance and features of new vehicles, and (3) stimulate the addition of new vehicle safety features. NCAP has a proven legacy of driving vehicle safety improvements effectively and quickly. Advancements to NCAP represent an opportunity to save more lives and prevent more injuries.

NHTSA established NCAP in 1978 in response to Title II of the Motor Vehicle Information and Cost Savings Act of 1972.[2] Beginning with MY 1979, NHTSA began testing passenger vehicles for frontal impact safety based on injury readings gathered from anthropomorphic test devices (ATDs, also known as crash test dummies) during crash tests. Star ratings were introduced in MY 1994 as a more consumer-friendly approach to conveying the relative safety of vehicles subject to NCAP's crash tests.[3] The agency added crash tests and ratings for side impact safety beginning in MY 1997.[4] A new test for rollover resistance assessment was added to the rating system in MY 2001 based on a vehicle's measured static properties as reflected by a calculation known as the Static Stability Factor (SSF).[5] Beginning with MY 2004, the NCAP rollover resistance rating was amended so that the rating is based on not only the SSF but also the results of a dynamic vehicle test.[6]

On January 25, 2007, NHTSA published a **Federal Register** notice announcing a public hearing and requesting comments on an agency report titled, ''The New Car Assessment Program (NCAP) Suggested Approaches for Future Enhancements.'' [7] Following the receipt of written comments and testimony at a March 7, 2007, public hearing, NHTSA published a notice on July 11, 2008, announcing specific

[1] See *www.regulations.gov*, Docket No. NHTSA–2015–0006–0024.

[2] Motor Vehicle Information and Cost Savings Act, Public Law 92–513, 86 Stat. 947 (1972).

[3] See 69 FR 61072. Docket No. NHTSA–2004–1876. Available at *https://federalregister.gov/a/04-23078*.

[4] U.S. Department of Transportation, Office of Public Affairs. (1997). NHTSA Releases Side Crash Test Results in New Consumer Information Program [Press Release]. Retrieved from *www.nhtsa.gov/About+NHTSA/Press+Releases/1997/NHTSA+Releases+Side+Crash+Test+Results+in+New+Consumer+Information+Program*.

[5] U.S. Department of Transportation, Office of Public Affairs. (2001). U.S. Department of Transportation Announces First Rollover Resistance Ratings [Press Release]. Retrieved from *www.nhtsa.gov/About+NHTSA/Press+Releases/2001/U.S.+Department+of+Transportation+Announces+First+Rollover+Resistance+Ratings*.

[6] U.S. Department of Transportation, Office of Public Affairs. (2003). NHTSA Announces New Rollover Test [Press Release]. Retrieved from *www.nhtsa.gov/About+NHTSA/Press+Releases/2003/NHTSA+Announces+New+Rollover+Test*.

[7] See 72 FR 3473. Docket No. NHTSA–2006–26555–0006. Available at *https://federalregister.gov/a/E7-1130*.

changes to NCAP.[8] The agency made frontal and side crash ratings criteria more stringent by upgrading crash test dummies including new 5th percentile female dummies, establishing new injury criteria, adding a new side pole crash test, and creating a single overall vehicle score that reflects a vehicle's combined frontal crash, side crash, and rollover ratings. In addition, the agency added information about the presence of advanced crash avoidance technologies in vehicles as part of NCAP. Technologies that were demonstrated to have a potential safety benefit and meet NHTSA's performance test measures were recommended to consumers on *www.safercar.gov*, where NCAP ratings and other vehicle safety information were posted. The agency implemented these NCAP enhancements beginning with MY 2011 vehicles. Subsequent to these changes to the program, the agency then initiated a rulemaking to modify the NCAP-related information required on the Monroney label.

When NCAP was first launched in 1978, vehicle manufacturers were slow to respond to the program by way of redesigning or making changes to their vehicles to improve vehicle safety performance ratings. Following the implementation of the July 11, 2008, NCAP upgrade, many new vehicles achieved 4- and 5- star NCAP ratings very quickly, even in new test scenarios with newly introduced ATDs.[9]

This signaled a new challenge for NHTSA. While the agency applauds the response of manufacturers who rise to meet the safety challenges set forth by NCAP, NHTSA is concerned that a high percentage of vehicles receiving 4 and 5 stars diminishes the program's ability to identify for consumers vehicles with exceptional safety performance. NHTSA believes enhancements to NCAP should be dynamic to address emerging available technologies, so that it can incentivize vehicle manufacturers to continue to make safety improvements to their vehicles.

Other NCAPs have formed around the world in the time since NHTSA's NCAP was first established. Today the following NCAP programs operate with missions and goals similar to those of the U.S. NCAP: Australasian New Car Assessment Program (ANCAP), New Car Assessment Program for Southeast Asia (ASEAN NCAP), China New Car Assessment Program (C–NCAP), The European New Car Assessment Program (Euro NCAP), Japan New Car Assessment Program (JNCAP), Korean New Car Assessment Program (KNCAP), and Latin American and the Caribbean New Car Assessment Program (Latin NCAP). These other NCAPs are in various stages of development, with Euro NCAP, formed in 1997, among the more well-established programs. Euro NCAP's test protocols are often referenced by other NCAP programs.

In the United States, in addition to NHTSA's NCAP, there is also the Insurance Institute for Highway Safety/Highway Loss Data Institute, an organization funded largely by the insurance industry that conducts its own vehicle testing and consumer vehicle safety information program.[10]

These programs and NHTSA's NCAP are all associated with Global NCAP,[11] a recently formed international organization with a multi-faceted mission including (1) supporting the development of new consumer crash test programs in emerging markets, (2) providing a platform for associated NCAPs to share information regarding best practices and approaches to promoting vehicle safety, and (3) researching vehicle safety technology innovations and ways of helping to advance those technologies.

III. April 5, 2013, Request for Comments—Brief Overview of Comments Received

On April 5, 2013, NHTSA published a document (78 FR 20597) requesting comments on a number of areas relating to the agency's NCAP. The agency requested comment in areas in which the agency believes enhancements to NCAP could be made either in the short term or over a longer period time. A total of 58 organizations or individuals submitted comments in response to the April 5, 2013, ''Request for comments'' (RFC). Comments were received from associations, consultants and research organizations, consumer organizations and advocacy groups, a government agency, an insurance company and an insurance organization, a publisher, suppliers to the automobile industry, a university, and vehicle manufacturers. The remaining comments were submitted by individuals (some anonymously). See *www.regulations.gov*, Docket No. NHTSA–2012–0180 for a full listing of the 58 commenters.

What follows is a brief summary of comments submitted in response to the April 5, 2013, RFC and that are relevant to today's notice. Comments received on a number of topics are not summarized in this document because this notice does not focus on all topics included in the April 5, 2013, document.[12]

A. Crashworthiness Areas

1. Test Dummies

Several commenters supported the general notion of improving test dummies used in NCAP. Concerns included the desire to work with the agency in the development of improved crash test dummies, the need for users to have sufficient lead time to obtain and gain experience with new dummies before they need to start using them in the design and development process, and the belief that new dummies and injury criteria should be formally introduced through a standardized regulatory process with sufficient lead time or a phase-in.

a. THOR 50th Percentile Male Metric ATD (THOR–50M)

While there was support for using the Test device for Human Occupant Restraint (THOR) 50M dummy in frontal NCAP, commenters were apprehensive about repeatability, reproducibility, durability, and ease-of-use issues. They questioned whether exclusive use of THOR–50M, instead of the Hybrid III 50th percentile male (HIII–50M) ATD, would result in incremental safety advances. One commenter, however, urged NHTSA to take the lead in harmonizing the performance and design of the THOR–50M, as it has for the WorldSID–50M dummy under the UNECE World Forum for Harmonization of Vehicle Regulations (WP.29).

b. WorldSID 50th Percentile Male ATD (WorldSID–50M)

While generally supporting the introduction of the WorldSID–50M into NCAP for side impact testing, some commenters noted the need for injury criteria for this ATD and the need for those criteria to be harmonized with those being developed by Euro NCAP. Some commenters expressed concern about the cost and lead time required for manufacturers to obtain WorldSID dummies. Remaining technical issues with respect to the WorldSID 5th

[8] See 73 FR 40016. Docket No. NHTSA–2006–26555–0114. Available at *https://federalregister.gov/a/E8-15620*.

[9] Park, B., Rockwell, T., Collins, L., Smith, C., Aram, M., ''The Enhanced U.S. NCAP: Five Years Later,'' The 24th International Technical Conference for the Enhanced Safety of Vehicles, Paper No. 15–0314, 2015.

[10] For information concerning the IIHS program see *http://www.iihs.org/iihs/ratings*.

[11] See *www.globalncap.org*. This Web site also includes links to all NCAP programs around the world.

[12] These include a possible silver car rating for older occupants, new test protocols for electric vehicles, comparative barrier testing for a frontal crash rating, advanced child dummies, the Hybrid III 95th percentile dummy, rear seat belt reminders, a possible family star rating, carry back ratings, adjustments to the baseline injury risk, and some ideas for providing better consumer information.

percentile female dummy (WorldSID–5F) were noted by a few commenters. One commenter suggested that the dummy should be incorporated into NCAP once the issues are resolved and the dummy is incorporated into Title 49 Code of Federal Regulations (CFR) Part 572, ''Anthropomorphic test devices.''

2. New and Refined Injury Criteria: Brain Injury Criterion, SID–IIs Thoracic and Abdomen Deflection, and Neck Injury Criterion, and Lower Leg

The agency sought public comment and supporting information on ATD injury criteria used to predict injury potential in vehicle crash tests.

a. Brain Injury Criterion (BrIC)

BrIC is an injury criterion for assessing brain injury resulting from head rotation, regardless of whether or not there is a head impact. Some commenters supported the introduction of BrIC into NCAP while others expressed reservations about the current state of knowledge and therefore opposed BrIC until more information becomes available.

b. SID–IIs Thoracic and Abdomen Deflection Criteria

Some commenters supported the inclusion of thoracic and abdominal rib deflection criteria for the SID–IIs dummy in side NCAP. Those who opposed using these injury criteria in NCAP indicated that changes to the injury criteria should first be considered through a rulemaking process as part of a possible revision to Federal Motor Vehicle Safety Standard (FMVSS) No. 214, ''Side impact protection.''

c. Neck Injury Criterion (Nij)

All comments on the neck injury criterion (Nij) were critical of the current risk curve and encouraged the agency to make revisions. Commenters generally suggested that the current Nij risk curve overstates the risk of neck injury, which in their opinion undercuts the validity of certain NCAP vehicle safety ratings.

d. Lower Leg

There were only a few comments on lower leg injury criteria, but those addressing this issue generally supported the idea of incorporating lower leg injury criteria into NCAP. Instruments to gather lower leg data must be thoroughly vetted, one commenter said, and another suggested that changes to lower leg injury criteria should be dealt with concurrently in a FMVSS 208 rulemaking and in NCAP.

3. Other Crashworthiness Areas

a. Pedestrian Protection

Many of the commenters in this area supported NHTSA basing whatever it does with respect to pedestrian protection on Global Technical Regulation (GTR) No. 9. Some did not support including pedestrian safety in NCAP, arguing instead that it should be the subject of regulation. Two commenters specifically urged NHTSA to consider using a type of ''point system'' similar to the one currently used by Euro NCAP to reward the implementation of advanced safety equipment such as pedestrian protection.

b. Rear Seat Occupants in Frontal Crashes

Many commenters spoke favorably about the potential benefits that may be derived from enhancing safety for rear seat occupants. Those in favor of the agency conducting additional tests to assess the rear seat environment expressed support for using the Hybrid III 5th percentile female (HIII–5F) dummy in NCAP, but opinions varied regarding what parameters should be evaluated in the test. Several commenters noted that current technologies used to protect occupants in the front seats may not be well-suited to protect those in the rear seat. One commenter disagreed, however, saying front seat technologies should be considered for possible application to the rear seat. Several other commenters specifically cautioned against changes in the back seat environment that could benefit one type of rear seat occupant while possibly adversely affecting others.

B. Crash Avoidance and Post-Crash Technologies

1. General Crash Avoidance/Post-Crash Technologies

The inclusion of crash avoidance technologies in NCAP was supported by many commenters. Only one commenter specifically indicated that more data on real-world safety benefits would be needed before they could comment on whether adding more technologies to NCAP is appropriate. Particular interest was expressed in the following technologies: blind spot detection, lane departure prevention/lane keeping assist, forward automatic pedestrian detection and braking, advanced lighting, crash imminent braking, dynamic brake support, and advanced automatic crash notification.

Even among those who supported a specific technology as a possible enhancement to NCAP, there were often differences in the details of how and when the particular enhancement should be pursued and implemented. Though there was a general sense among the commenters that adoption rates of these technologies will continue to rise in the new light-vehicle marketplace and therefore they should be incorporated into NCAP, there were overwhelming differences in viewpoints about the conditions under which these technologies should be incorporated into NCAP.

2. Blind Spot Detection (BSD)

Most of those who commented on BSD systems agreed that this technology has the potential to provide safety benefits although safety benefits estimates were not provided. Only some of these commenters specifically indicated that BSD should be included in NCAP. One commenter suggested that a vehicle should be given ''extra points'' in NCAP if equipped with BSD while another said that BSD should be included in the NCAP 5-star safety rating system. Another commenter said that it should not be included in a star rating and suggested instead including BSD and lane change assist systems in the current NCAP approach of identifying advanced crash avoidance technology systems with a check mark on *www.safercar.gov* for vehicles equipped with those systems and that meet NCAP's performance test criteria.

3. Advanced Lighting [13]

Most commenters spoke favorably of the potential for advanced lighting technologies to have a positive impact on vehicle safety. The favorable comments suggested these commenters support the inclusion of advanced lighting in NCAP; however, only a few of the commenters clearly stated that advanced lighting should be included in NCAP.

Other commenters expressed the need for additional research into the benefits of advanced lighting. Commenters also discussed the need to modify FMVSS No. 108, ''Lamps, reflective devices, and associated equipment,'' so that advanced lighting technologies now approved for use in other areas of the world can be introduced in the United States.

4. Crash Imminent Braking (CIB) and Dynamic Brake Support (DBS)

Most of those commenting on the 2013 RFC supported including CIB and

[13] Advanced lighting in the context of this program currently includes lower beam headlighting performance, semi-automatic headlamp beam switching, and amber rear turn signal lamps.

DBS in NCAP in some way. On January 28, 2015, NHTSA published an RFC notice in the **Federal Register** announcing the agency's plan to recommend these technologies in NCAP.[14] Comments received from the 2013 RFC notice were conveyed as part of that proceeding and will not be repeated here. The final agency decision notice on the inclusion of these technologies in NCAP was recently published in the same docket.

C. Potential Changes to the Rating System

1. Update of the Rollover Risk Curve

Five of those who commented in this area focused on the importance of revising the distribution of crash types used in calculating the Overall Vehicle Score to reflect the reduction in rollover crashes among ESC-equipped vehicles.

Those who offered specific suggestions regarding the appropriate weighting factor for rollover in determining a vehicle's Overall Vehicle Score suggested that it should be 10 percent. In addition to the 10 percent for rollover, one commenter mentioned a study it had commissioned that indicated the weighting factor for frontal and side crash ratings should be 54 percent and 36 percent, respectively, as opposed to the current weighting factors of 42 percent for frontal, 33 percent for side, and 25 percent for rollover.

2. Advanced Technology Systems

Some commenters asked the agency to maintain its current approach of recommending the technologies instead of rating them while others supported rating the technologies with stars. A few commenters preferred a combined crash avoidance and crashworthiness rating while others suggested that they should remain as separate ratings. Euro NCAP's ''point system'' approach was also mentioned as a possibility for rating, ranking, or assessing various crash avoidance technologies.

IV. Overview of This Notice

Purpose and Rationale

The purpose of this notice is to solicit public comment on the agency's plan to advance the capabilities and safety outcomes of NHTSA's NCAP program. The agency aims to have NCAP continue to serve as a world leader in providing consumers with vehicle safety information generated by the latest available vehicle safety assessment techniques and tools. The agency believes that NCAP works best if the program keeps pace with advancements in safety technologies and capabilities so that consumers can be assured that evaluation criteria used provide the most thorough measure of vehicle safety possible using the current state-of-the-art so that only truly exceptional vehicles achieve 4- and 5-star ratings.

As discussed previously, given the high percentage of recent model year vehicles rated by NCAP now receiving 4- and 5-star ratings, it is an opportune time for the agency to consider further refinements to NCAP to assure that only vehicles with truly exceptional safety features and performance will receive 4- and 5-star ratings. In the end, the agency's goal is for the program to provide a continuing incentive for vehicle manufacturers to further improve the safety of the vehicles they manufacture.

As vehicle safety innovations offering substantial safety potential continue to emerge, the agency believes that it must also use NCAP, its most effective means of encouraging vehicle safety improvements and innovations through market forces, to incentivize vehicle manufacturers to equip their vehicles with these technologies. In addition, the agency must continually strive to expand and improve the safety information that is conveyed to consumers and continually increase the effectiveness with which that information is communicated. To that end, this notice outlines NHTSA's intention to implement a new 5-star rating system to convey vehicle safety information in three major areas—crashworthiness, crash avoidance, and pedestrian protection.

The agency considered a variety of information in developing the potential new approaches for NCAP discussed in this RFC notice. The agency has reviewed comments submitted in response to the April 5, 2013, notice, evaluated its current research activities, and considered recent recommendations from the National Transportation Safety Board (NTSB) and other consumer organizations and advocacy groups that encourage the inclusion of advanced technologies as part of the NCAP 5-star safety rating system.[15]

This RFC notice outlines the agency's plan for this NCAP upgrade. It describes in detail new program areas that NHTSA intends to add to NCAP, the timeline to implement these enhancements, and a new way of calculating star ratings. The agency recognizes that by sharing, and seeking comment on its intentions, it allows the public an opportunity to inform the agency of information relevant to this NCAP upgrade. In addition, this RFC notice provides the automotive industry the opportunity to begin taking the steps that will be needed to adapt to the enhancements in this NCAP upgrade.

In the April 5, 2013, RFC notice, NHTSA noted ''there are four prerequisites for considering an area for adoption as a new NCAP enhancement.'' [16] First, a safety need must be known or be capable of being estimated based on what is known. Second, vehicle and equipment designs must exist or at least be anticipated in prototype designs that are capable of mitigating the safety need. Third, a safety benefit must be estimated, based on the anticipated performance of the existing or prototype design. Finally, it must be feasible to develop a performance-based objective test procedure to measure the ability of the vehicle technology to mitigate the safety issue.

To the extent possible, these criteria will be discussed in this RFC notice for each feature being considered. Data may not be available for each element, but NHTSA will consider information to the extent that it is available. NHTSA welcomes any data to support the analysis of these criteria. NHTSA may consider other factors that are not among the criteria listed above. Additionally, NHTSA may weight some of these criteria differently for some features than for others, if NHTSA believes it is in the interest of developing a robust program that encourages safety advancements in the marketplace.

V. Areas Under Consideration for Inclusion in or Advancement of NCAP

A. Frontal Crashworthiness

1. Real-World Frontal Crash Data

In September 2009, NHTSA published a report that sought to describe why people were still dying in frontal crashes despite the use of seat belts, air bags, and the crashworthy structures of late-model vehicles.[17] The study found that many fatalities and injuries could be attributed to crashes involving poor

[14] See 80 FR 4630. Docket No. NHTSA–2015–0006. Available at *https://federalregister.gov/a/2015-01461*.

[15] On June 8, 2015, the agency received a ''Safety Recommendation'' letter from the NTSB urging NHTSA to expand the NCAP 5-star safety rating system to include a scale that rates the performance of advanced technologies, specifically forward collision avoidance systems.

[16] See 78 FR 20597. Docket No. NHTSA–2012–0180. Available at *https://federalregister.gov/a/2013-07766*.

[17] Bean, J., Kahane, C., Mynatt, M., Rudd, R., Rush, C., Wiacek, C., National Highway Traffic Safety Administration, ''Fatalities in Frontal Crashes Despite Seat Belts and Air Bags,'' DOT HS 811 202, September 2009.

structural engagement between a vehicle and its collision partner. These crashes consisted mainly of corner impacts, oblique crashes, impacts with narrow objects, and heavy vehicle underrides.

To better understand and classify the injuries and fatalities from crashes involving oblique and corner impacts, the agency took a new approach to field data research. A 2011 report detailed this new method to more comprehensively identify frontal crashes based on an alternate interpretation of vehicle damage characteristics.[18] NHTSA incorporated this approach into its efforts to examine frontal crashes occurring in the field data. Furthermore, recognizing that occupant kinematics and restraint engagement differed among frontal crash types, the agency's new method allowed for better identification of frontal crashes with more emphasis on occupant responses than vehicle damage characteristics. When using this method, the population of frontal crashes generated tends to include some crashes that would previously have been classified as side impact crashes. In this, there may be damage located on the side plane of a given vehicle, though the kinematics of the occupants resembles those typically seen in a conventionally coded frontal impact.

In support of this RFC notice, National Automotive Sampling System—Crashworthiness Data System (NASS–CDS) data from case years 2000 through 2013 were chosen for analysis using the new approach. The resulting NASS–CDS data generated for this effort are contained in Appendix I. Crashes were selected to include passenger vehicles involved in a tow-away non-rollover crash with a Principal Direction of Force (PDOF) between 330 degrees and 30 degrees (11 o'clock to 1 o'clock). Only non-ejected, belt-restrained occupants, who sustained AIS 2 and higher severity injuries or were killed, were selected from those crashes. The two crash configurations responsible for the most injuries and fatalities in the resulting frontal crash data set are shown in Table 1 below. They are the co-linear full overlap and the left (driver side) oblique crash modes.

Table 1 shows the number of restrained Maximum Abbreviated Injury Scale (MAIS) 2+ and 3+ injured and fatal occupants seated in the front rows of vehicles involved in left oblique and co-linear full frontal crashes.[19] These are unadjusted, annualized occupant counts. This means that the total weighted counts over the 14-year period are simply divided by 14 to produce an average annual count. Case weights were not adjusted to account for factors such as vehicle age or matching fatality counts in the Fatality Analysis Reporting System (FARS). There were more MAIS 2+ and 3+ injured occupants from left oblique crashes than co-linear full overlap crashes in this dataset. The numbers of fatalities are very similar when comparing both crash types.

TABLE 1—DISTRIBUTION OF ANNUAL RESTRAINED MAIS 2+, MAIS 3+, AND FATAL OCCUPANTS IN LEFT OBLIQUE AND CO-LINEAR FRONTAL CRASHES

Crash mode	Front row		
	MAIS 2+	MAIS 3+	Fatal
Co-linear full overlap	17,634	4,037	640
Left oblique	19,131	5,354	633
Total	36,765	9,392	1,273

Source: NASS–CDS (2000–2013).

The occupant counts defined in Table 1 were further examined to better understand which individual body regions in both of these frontal crash modes sustained AIS 3+ injuries. The following body regions were used in the classification of injuries: Head (including face injuries, brain injuries, and skull fracture); Neck (including the brain stem and cervical spine); Chest (thorax); Abdomen; Knee-Thigh-Hip; Below Knee (lower leg, feet, and ankles); Spine (excluding the cervical spine); and Upper Extremity.

Figure 1 shows the break-down of drivers with MAIS 3+ injuries in each body region for both frontal crash modes. These unadjusted, annualized counts indicate the number of times a given body region sustained an AIS 3 or higher injury among the drivers in Table 1. Some drivers may be represented in multiple columns. Some key inferences can be made. First, drivers in oblique crashes experienced more MAIS 3+ injuries to nearly every body region than drivers in co-linear crashes. Drivers in oblique crashes experienced more injuries to the head, neck and cervical spine, abdomen, upper extremities, knee/thigh/hip (KTH), and areas below the knee. Though drivers in co-linear crashes experienced more MAIS 3+ chest injuries than drivers in oblique crashes, these injuries were the highest in number for both crash types. Driver injuries in both frontal crash types occurred to a wide variety of body regions.

[18] National Highway Traffic Safety Administration, ''NASS Analysis in Support of NHTSA's Frontal Small Overlap Program,'' DOT HS 811 522, August 2011.

[19] The Maximum Abbreviated Injury Scale (or MAIS) is the maximum injury per occupant.

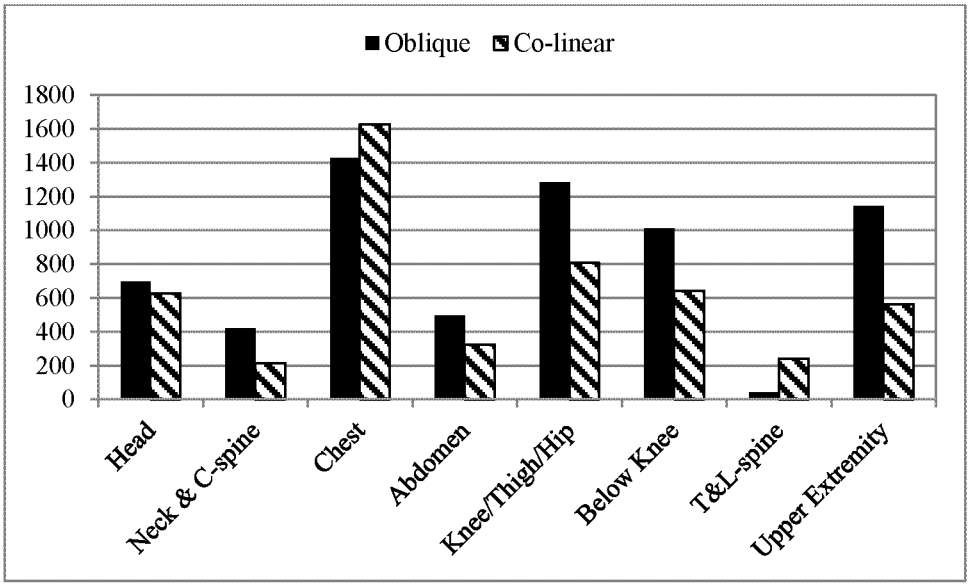

Figure 1. Number of Annual Driver MAIS 3+ Injuries by Body Region in Co-linear and Left Oblique Crashes

Source: NASS-CDS (2000-2013)

Figure 2 is similar to Figure 1, but provides an overview of the MAIS 3+ injuries for the right front passenger instead. It shows a pattern similar to the driver; MAIS 3+ injuries in left oblique crashes outweigh the numbers of similar injuries in co-linear crashes. Right front passengers in left oblique crashes experienced more injuries to the head, neck and cervical spine, chest, abdomen, upper extremities, and KTH regions than right front passengers involved in co-linear full frontal crashes. Injuries for the right front passenger occurred to a wide variety of body regions, which is similar to what was observed for the driver.

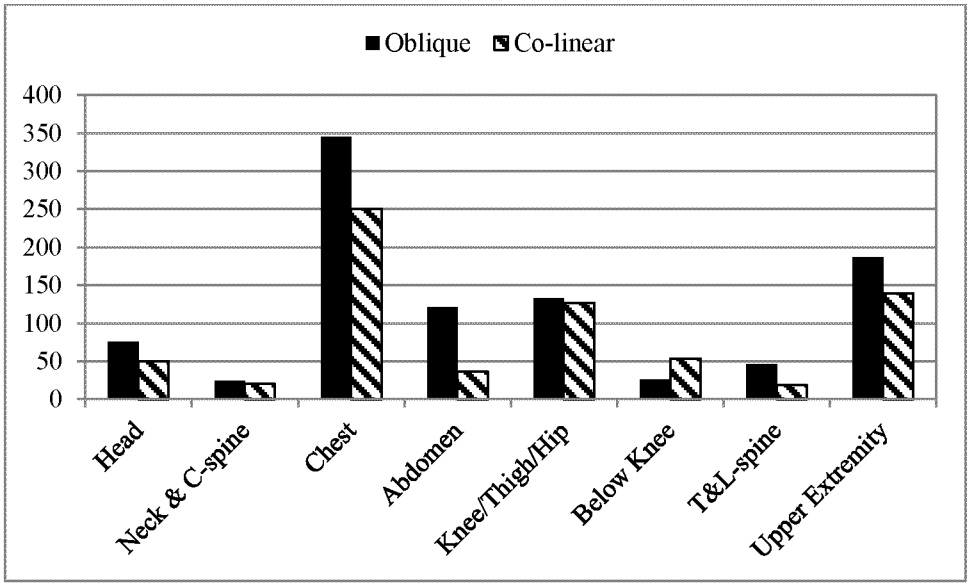

Figure 2. Number of Annual Front Passenger MAIS 3+ Injuries by Body Region in Co-linear and Left Oblique Crashes

Source: NASS-CDS (2000-2013)

This real-world data analysis suggests that there is an opportunity for the agency to continue examining the oblique crash type that was identified as a frontal crash problem by NHTSA in 2009. Real-world co-linear crashes that are represented in FMVSS No. 208, ''Occupant crash protection,'' and the current full frontal NCAP test are also

still resulting in serious injuries and fatalities.

2. Full Frontal Rigid Barrier Test

NCAP intends to continue conducting its current full width rigid frontal barrier test at 56 km/h (35 mph). As shown in the 2000–2013 NASS–CDS data discussed earlier, these frontal crashes are still a major source of injuries and fatalities in the field. However, NHTSA intends to update the ATDs to evaluate occupant protection in NCAP's full frontal crash. Rather than using the HIII–50M ATD, NHTSA intends to use the THOR–50M ATD in the driver's seat of full frontal rigid barrier tests conducted for this NCAP upgrade. NHTSA intends to continue using the HIII–5F dummy in the right front passenger's seat of these tests for frontal NCAP, though the ATD would now be seated at the mid-track position rather than the full-forward position it is currently placed in (based on the current NCAP and FMVSS No. 208 test procedures). In every full width rigid barrier frontal NCAP test, the agency intends to seat another HIII–5F ATD in the second row of the vehicle, behind the right front passenger. The agency is seeking comment on the seating procedures for these dummies in the full frontal rigid barrier test.

The THOR–50M ATD requires a different seating procedure than the currently used HIII–50M ATD. Some modifications are necessary in the areas of adjusting the seat back angle, seat track, and positioning of the legs, feet, shoulder, and other body regions related to the inherent physical characteristics of the THOR–50M ATD. The agency is seeking comment on draft procedures for seating a THOR–50M ATD in the driver's seat of vehicles.[20]

NHTSA seeks comment on an alternative seating procedure for the right front passenger ATD, the HIII–5F. Currently, the HIII–5F ATD is seated in the forward-most seating position for FMVSS No. 208 and NCAP full frontal tests. In light of real-world data gathered from NASS–CDS, (2000–2013 full frontal crashes, with MAIS 2+ injured occupants, discussed further below) the agency intends to conduct research tests with the HIII–5F ATD seated in the right front passenger seat's mid-track location instead of the forward-most location. This data, shown below in Figure 3, indicates that the majority of MAIS 2+ injured occupants sit in a mid- to rear seat track position.[21] The number of right front passengers injured when seated in the full-forward position was the smallest number of occupants seen in this data set. In addition, the right front passenger seats in this data set were most likely to be placed in the forward-mid or middle position along the seat track. The prevalence of real-world injuries to occupants seated at these positions, along with research indicating that higher chest deflections may be seen for occupants seated at the mid-track position,[22] indicate there may be an opportunity for safety gains for NCAP to test vehicles with the right front passenger ATD in the mid-track position.

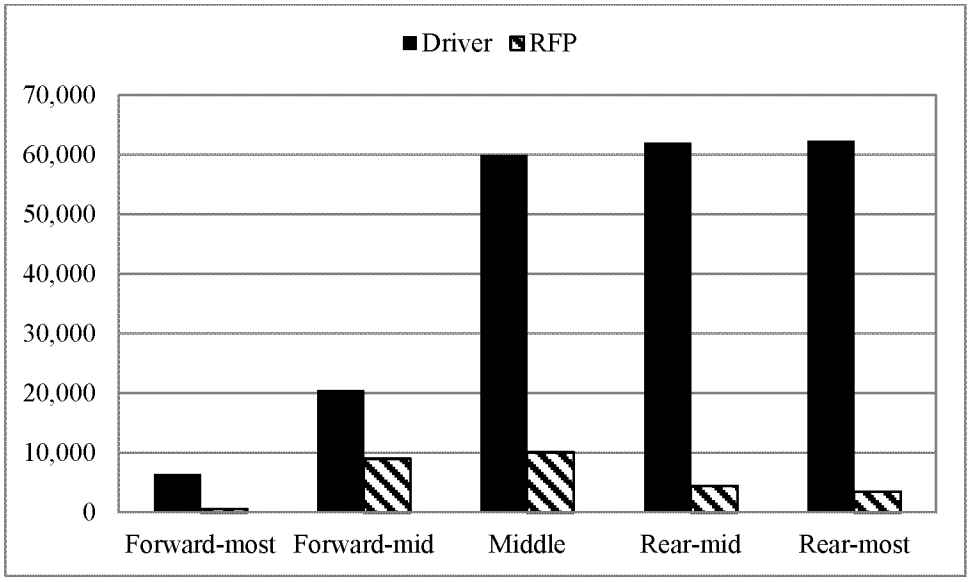

Figure 3. Number of MAIS 2+ injured occupants by seat track location in full frontal crashes.
Source: NASS-CDS (2000-2013)

As such, the agency is seeking comment on the appropriateness of potentially seating the right front passenger HIII–5F dummy in a position that is closer to (or at) the mid-track location. NHTSA plans to conduct research using the NCAP procedure but with the HIII–5F seated in the mid-track location instead. The agency believes this choice in seating location could also allow NCAP's testing to serve as a compliment to the forward-most seating location used in FMVSS No. 208.[23] NHTSA included a draft procedure for seating the HIII–5F ATD in the mid-track location in the docket of this RFC notice. The agency also included a draft procedure for seating the same ATD in the row behind the right front passenger, but this very closely follows the seating procedure for the current 5th

[20] Draft seating procedures may be found in the docket for this notice.

[21] Forward-mid is defined as the seat track position that is halfway between forward-most and mid-track (middle), while rear-mid is defined as the seat track position between the mid-track and rear-most.

[22] Tylko, S., and Bussières, A. ''Responses of the Hybrid III 5th Female and 10-year-old ATD Seated in the Rear Seats of Passenger Vehicles in Frontal Crash Tests.'' IRCOBI Conference 2012, Paper IRC–12–65.

[23] See 65 FR 30680. Docket No. NHTSA 00–7013 Notice 1. Available at *https://federalregister.gov/a/00-11577*.

percentile rear passenger dummy in the side moveable deformable barrier (MDB) NCAP test, the SID–IIs.[24]

3. Frontal Oblique Test

As stated previously, NHTSA published a report in 2009 examining why occupant fatalities are still occurring for belted occupants in air bag-equipped vehicles involved in frontal crashes.[25] Around this time, the agency initiated research to develop both small overlap and oblique test procedures.[26]

To establish a baseline for testing, NHTSA initiated research by conducting a series of full-scale vehicle-to-vehicle tests to understand occupant kinematics and vehicle interactions. The agency then conducted barrier-to-vehicle tests using the MDB already in use in FMVSS No. 214. These tests failed to produce the results seen in the vehicle-to-vehicle tests, which prompted NHTSA to develop a more appropriate barrier to use with the frontal oblique test configuration.[27]

The resulting modified version of the FMVSS No. 214 MDB is called the Oblique Moving Deformable Barrier (OMDB). Some differences between the OMDB and the FMVSS No. 214 MDB are that the OMDB has a face plate wider than the barrier outer track width, a suspension to prevent bouncing at high speeds, and an optimized barrier honeycomb depth and stiffness.[28] The OMDB was optimized to produce target vehicle crush patterns similar to real-world cases while minimizing the likelihood of the rigid face plate contacting the target vehicle due to honeycomb bottoming-out.[29] It is heavier than the FMVSS No. 214 MDB at a weight of 2,486 kilograms (kg) (5,480 pounds (lb)).

Per NHTSA's current frontal oblique testing protocol, the OMDB impacts a stationary vehicle at a speed of 90 km/h (56 mph).[30] This vehicle is placed at a 15-degree angle and a 35-percent overlap occurs between the OMDB and the front end of the struck vehicle. The selected test condition was shown to be representative of a midsize vehicle-to-vehicle 15-degree oblique, 50-percent overlap test, resulting in a 56 km/h (35 mph) delta-V. When a midsize vehicle is exposed to the OMDB test condition it creates a longitudinal delta-V of about 56 km/h (35 mph). The test speed was selected to be analogous with the current severity of the NCAP full width frontal rigid barrier test of a midsize vehicle.[31] The agency has published the results of the frontal oblique test program several times over the past few years in public forums [32] [33] In Saunders (2013), NHTSA also demonstrated the frontal oblique test protocol's repeatability. Generally, the results of this research have shown good agreement with the agency's continued examination of this particular frontal crash problem and the injuries and fatalities it causes. The fatalities and injuries caused by this crash scenario were surveyed at length in Rudd's 2011 analysis of field data from both the NASS–CDS and CIREN databases.[34] The findings discussed in Rudd (2011) as well as the NASS–CDS analysis presented earlier demonstrate that there are real-world injuries occurring to the knee-thigh-hip, lower extremities, head, and chest. Accordingly, the agency's frontal oblique research tests predict a high probability of injury to these body regions.

NHTSA has considered existing regulations and consumer information programs, both within the agency and outside of the agency, in the development of its frontal oblique testing protocol. The most similar test mode is the Insurance Institute for Highway Safety's small overlap frontal test (IIHS–SO). The IIHS–SO test is a co-linear impact with a rigid barrier that overlaps with 25 percent of the vehicle's width, and for most vehicles does not engage the primary longitudinal structure of the front end of the vehicle. As such, the IIHS–SO test tends to drive structural countermeasures outside of the frame rails of the vehicle and strengthening of the occupant compartment.[35] The OMDB in the NHTSA frontal oblique test, in contrast, does interact with at least one frame rail of the vehicle, often resulting in a more severe crash pulse that puts greater emphasis on restraint system countermeasures. Also, because the OMDB impacts a stationary vehicle at the same speed regardless of the target vehicle's mass, the frontal oblique test protocol is a constant energy test, which allows for the comparison of test results between vehicle classes.

Recently, the agency presented its results from testing late model, high sales volume vehicles.[36] Those results indicated that many of these modern vehicles that perform well in tests conducted for other consumer information programs (including the IIHS–SO test described above) and air bags meeting FMVSS No. 226, ''Ejection Mitigation,'' requirements may need additional design improvements to address real-world injuries and fatalities in frontal oblique crashes.[37] The agency intends to continue looking into the differences between the IIHS–SO and its own frontal oblique test. The observations in Saunders (2015), along with the real-world data presented previously in this document, indicate there is an opportunity to improve upon current vehicle designs in an effort to reduce fatalities and injuries in real world oblique crashes.

NCAP intends to test and rate new vehicles under a protocol very similar to the frontal oblique test protocol previously researched by the agency.[38] The program also intends to use the associated draft seating procedures for the THOR–50M ATDs in both the driver's seat and the right front passenger's seat.[39]

[24] ''U.S. Department of Transportation National Highway Traffic Safety Administration Laboratory Test Procedure for the New Car Assessment Program Side Impact Moving Deformable Barrier Test,'' Docket No. NHTSA–2015–0046, September 2013.

[25] National Highway Traffic Safety Administration, ''Fatalities in Frontal Crashes Despite Seat Belts and Air Bags,'' DOT HS 811 202, September 2009.

[26] Saunders, J., Craig, M., Parent, D., ''Moving Deformable Barrier Test Procedure for Evaluating Small Overlap/Oblique Crashes,'' SAE Int. J. Commer. Veh. 5(1):2012, doi:10.4271/2012–01–0577.

[27] Saunders, J., Craig, M.J., Suway, J., ''NHTSA's Test Procedure Evaluations for Small Overlap/Oblique Crashes,'' The 22nd International Technical Conference for the Enhanced Safety of Vehicles, Paper No. 11–0343, 2011.

[28] Ibid.

[29] Ibid.

[30] Drawing package available in the docket for this notice.

[31] Saunders, J., Craig, M.J., Suway, J., ''NHTSA's Test Procedure Evaluations For Small Overlap/Oblique Crashes,'' 22nd ESV Conference, Paper No. 11–0343, 2011.

[32] Saunders, J. and Parent, D., ''Repeatability of a Small Overlap and an Oblique Moving Deformable Barrier Test Procedure,'' SAE World Congress, Paper No. 2013–01–0762, 2013.

[33] Saunders, J., Parent, D., Ames, E., ''NHTSA Oblique Crash Test Results: Vehicle Performance and Occupant Injury risk Assessment in Vehicles with Small Overlap Countermeasures,'' The 24th International Technical Conference for the Enhanced Safety of Vehicles, Paper No. 15–0108, 2015.

[34] Rudd, R., Scarboro, M., Saunders, J., ''Injury Analysis of Real-World Small Overlap and Oblique Frontal Crashes,'' The 22nd International Technical Conference for the Enhanced Safety of Vehicles, Paper No. 11–0384, 2011.

[35] Mueller, B.C., Brethwaite, A.S., Zuby, D.S., & Nolan, J. M. (2014). Structural Design Strategies for Improved Small Overlap Crashworthiness Performance. Stapp Car Crash Journal, 58, 145.

[36] Saunders, J., Parent, D., Ames, E., ''NHTSA Oblique Crash Test Results: Vehicle Performance and Occupant Injury Risk Assessment in Vehicles with Small Overlap Countermeasures,'' The 24th International Technical Conference for the Enhanced Safety of Vehicles, Paper No. 15–0108, 2015.

[37] See 76 FR 3212. Docket No. NHTSA–2011–0004. Available at *https://federalregister.gov/a/2011-547*.

[38] Draft test procedure available in the docket for this notice.

[39] Draft seating procedures may be found in the docket for this notice.

The potential exists for NCAP to encourage vehicles design changes that address this particular crash type. As previously noted, the occupants in Saunders (2015) showed a range of responses across several injury types.[40] This suggests that the frontal oblique test has the ability to discriminate between vehicle performances and, in turn, could allow NCAP to offer consumers comparative safety information for vehicles exposed to this crash mode.

At this time, the agency only intends to conduct left side frontal oblique impact tests in NCAP. As discussed in Appendix I, left side oblique impacts constitute a greater proportion of real-world oblique crashes. Research on both the left and right frontal oblique crash impacts is ongoing in an effort to gain a better understanding of the restraint and structural countermeasures needed to combat occupant injury in oblique impacts on both sides of vehicles.

4. Frontal Test Dummies

a. Hybrid III 50th Percentile Male ATD (HIII–50M)

NCAP does not intend to use the HIII–50M ATD in frontal crash tests in this NCAP upgrade. This dummy is still sufficient for the needs of regulatory standards (such as FMVSS No. 208, which assesses minimal performance of vehicles with this device) and will continue to be used in that capacity. Significant advancements in vehicle safety and restraint design have taken place since the HIII–50M was incorporated into Part 572. NCAP seeks a test device that produces the most biofidelic capability and response to distinguish between the levels of occupant protection provided by modern vehicles so that manufacturers are continually challenged to design safer vehicles and consumers may be afforded the most complete and meaningful comparative safety information possible. NHTSA believes that the THOR–50M ATD has this potential. Information on the biofidelity, anthropometry, injury measurement, and other capabilities of the THOR–50M ATD is included in the section following.

b. THOR 50th Percentile Male Metric ATD (THOR–50M)

To provide consumers with the most complete and meaningful safety information possible, the agency intends to implement the THOR–50M in both frontal NCAP crash modes. The THOR–50M would be seated in the driver's seat in the full frontal rigid barrier crash test, and in both the driver's and right front passenger's seats in the frontal oblique crash test.

NHTSA currently uses the HIII–50M ATD for frontal NCAP and as one of the ATDs for compliance frontal crash testing, the latter falling under FMVSS No. 208. While the HIII–50M ATD is sufficient for the needs of regulatory standards including FMVSS No. 208, which ensure an acceptable level of safety performance has been met, NHTSA believes that a more sensitive evaluation tool would be beneficial to help differentiate between the advancements in vehicle safety developed since the HIII–50M ATD was incorporated into Part 572 in 1986.[41] Other organizations have also announced their intentions to begin using the THOR–50M in consumer information settings. Euro NCAP indicated that it would use the THOR–50M in the development of a new offset frontal impact protection test in its 2020 Road Map published in March 2015.[42]

i. Background

NHTSA has been researching advanced ATDs since the early 1980s. The goal of this research has been to create a device that represents the responses of human occupants in modern restraint and vehicle environments. NHTSA began developing the THOR–50M around the same time that the HIII–50M was added in 49 CFR part 572 for use in FMVSS No. 208. The THOR–50M was designed to incorporate advances in biomechanics and injury prediction that were not included in the design of the HIII–50M ATD.

NHTSA has published its work on the THOR–50M throughout its development, including the THOR Alpha,[43] THOR–NT,[44] THOR–NT with Modification Kit,[45] and THOR Metric [46] build levels. For the purposes of this RFC notice, further references to the THOR–50M indicate 472–0000 Revision F of the THOR drawing package, released on the NHTSA Web site in September 2015.[47] The performance of this ATD shall meet the specifications defined in the THOR–50M Qualification Procedures Manual.[48]

NHTSA has updated the public on its THOR–50M research in various forums.[49] On January 20, 2015, NHTSA held a public meeting to present further updates to its work with THOR–50M.[50] NHTSA presented draft descriptions of updated qualification procedures and data supporting the repeatability and reproducibility of the THOR–50M. During this meeting, several industry representatives took the opportunity to present their research related to the ATD. NHTSA itself has used the THOR–50M ATD extensively in testing to support both biomechanics and crashworthiness research objectives.[51]

[40] Saunders, J., Parent, D., Ames, E., ''NHTSA Oblique Crash Test Results: Vehicle Performance and Occupant Injury Risk Assessment in Vehicles with Small Overlap Countermeasures,'' The 24th International Technical Conference for the Enhanced Safety of Vehicles, Paper No. 15–0108, 2015.

[41] See 51 FR 26701. **Federal Register** documents published before 1993 (Volumes 1–58) are available through a Federal Depository Library.

[42] European New Car Assessment Programme, ''2020 Roadmap,'' March 2015. [http://Euro *NCAP.blob.core.windows.net/media/16472/euro-ncap-2020-roadmap-rev1-march-2015.pdf*]

[43] Haffner, M., Rangarajan, N., Artis, M., Beach, D., Eppinger, R., & Shams, T., ''Foundations and Elements of the NHTSA THOR Alpha ATD Design,'' The 17th International Technical Conference for the Enhanced Safety of Vehicles, Paper No. 458, 2001.

[44] Shams, T., Rangarajan, N., McDonald, J., Wang, Y., Platten, G., Spade, C., Pope, P., & Haffner, M., ''Development of THOR NT: Enhancement of THOR Alpha—the NHTSA Advanced Frontal Dummy,'' The 19th International Technical Conference for the Enhanced Safety of Vehicles, Paper No. 05–0455, 2005.

[45] Ridella, S. & Parent, D., ''Modifications to Improve the Durability, Usability, and Biofidelity of the THOR–NT Dummy,'' The 22nd International Technical Conference for the Enhanced Safety of Vehicles, Paper No. 11–0312, 2011.

[46] Parent, D., Craig, M., Ridella, S., & McFadden, J., ''Thoracic Biofidelity Assessment of the THOR Mod Kit ATD,'' The 23rd International Technical Conference for the Enhanced Safety of Vehicles, Paper No. 13–0327, 2013.

[47] Drawing package available in the docket for this notice.

[48] Draft qualification procedures available in the docket for this notice.

[49] Parent, D., ''NHTSA THOR Update,'' National Highway Traffic Safety Administration, Washington, DC, September 2013. [*www.nhtsa.gov/DOT/NHTSA/NVS/Biomechanics%20&%20Trauma/NHTSA_THOR_update_2013–09–30.pdf*]; Parent, D., ''Applications of the THOR ATD in NHTSA Research,'' Society of Automotive Engineers Government/Industry Meeting, January 2014. [*www.nhtsa.gov/DOT/NHTSA/NVS/Public%20Meetings/SAE/2014/2014–SAE–GIM_Parent.pdf*]

[50] National Highway Traffic Safety Administration, ''THOR Public Meeting,'' January 20, 2015. [*www.nhtsa.gov/Research/Biomechanics+&+Trauma/THOR+Public+Meetings*]

[51] Martin, P. &Shook, L., ''NHTSA's THOR–NT Database,'' The 20th International Technical Conference for the Enhanced Safety of Vehicles, Paper No. 07–0289, 2007; Saunders, J., Craig, M. & Suway, J., ''NHTSA's Test Procedure Evaluations for Small Overlap/Oblique Crashes,'' The 22nd International Technical Conference for the Enhanced Safety of Vehicles, Paper No. 11–0343, 2011; Saunders, J., Craig, M., & Parent, D., ''Moving Deformable Barrier Test Procedure for Evaluating Small Overlap/Oblique Crashes,'' SAE International Journal of Commercial Vehicles, 5(2012–01–0577), 172–195, 2012; Saunders, J. & Parent, D., ''Repeatability of a Small Overlap and an Oblique Moving Deformable Barrier Test Procedure,'' SAE World Congress, paper no. 2013–01–0762, 2013; Saunders, J. & Parent, D., ''Assessment of an Oblique Moving Deformable Barrier Test Procedure,'' The 23rd International Technical Conference for the Enhanced Safety of Vehicles, Paper No. 13–0402, 2013; Forman, J., Michaelson,

Continued

ii. THOR–50M Design

To ensure that the dummy responds in a human-like manner in a vehicle crash environment it is necessary that the size and shape of the dummy, referred to as anthropometry, provides an accurate representation of a mid-sized human. To accomplish this, a study on the Anthropometry of Motor Vehicle Occupants (AMVO) was carried out by the University of Michigan Transportation Research Institute (UMTRI) to document the anthropometry of a mid-size (50th percentile in stature and weight) male occupant in an automotive seating posture.[52] [53] The AMVO anthropometry was used as a basis for the development of the THOR–50M design.

The THOR–50M includes anatomically-correct designs in the neck, chest, shoulder, spine, and pelvis in order to represent the human occupant response in a frontal or frontal oblique vehicle crash environment.

The cervical neck column of the THOR–50M has a unique design. In the THOR–50M, the neck is connected to the head via three separate load paths (two cables—anterior and posterior—and a pin joint centered between the cables) versus a single path for other ATDs (a pin joint only). The biomechanical basis of the THOR–50M neck design is well established.[54] [55] The construction of the THOR–50M neck allows the head to rotate relatively freely in the fore and aft directions. THOR can undergo low levels of uninjurious ''nodding'' without generating an appreciable moment at its pin joint. Because of this design, a THOR-specific risk curve for neck injury (discussed below) is better aligned with human injury risk at all levels of risk.

Throughout the development of the THOR–50M ATD, specific attention was given to the human-like response and injury prediction capability of the chest. The rib cage geometry is more realistic because the individual ribs are angled downward to better match the human rib orientation.[56] Performance requirements were selected to ensure human-like behavior in response to central chest impacts, oblique chest impacts, and steering rim impacts to the rib cage and upper abdomen.[57] Better chest anthropometry means that the dummy's interaction with the restraint system (as the seat belt lies over the shoulder and across the chest, for example) is more representative of the interaction humans would experience. Moreover, NHTSA has previously identified instrumentation opportunities beyond a single-point chest deflection measurement system that may improve the assessment of thoracic loading in a vehicle environment with advanced restraint technology such as air bags and pretensioners.[58] Thoracic trauma imparted to restrained occupants does not always occur at the same location on the rib cage for all occupants in all frontal crashes.[59] Kuppa and Eppinger found (in a data set consisting of 71 human subjects in various restraint systems and crash severities) that using the maximum deflection from multiple measurement locations on the chest resulted in improved injury prediction.[60] The THOR–50M ATD is capable of measuring three-dimensional deflections at four different locations on the rib cage. This instrumentation, coupled with its thoracic biofidelity,[61] provides the THOR–50M ATD with the ability to better predict thoracic injuries and to potentially drive more appropriate restraint system countermeasures.

The THOR–50M shoulder was developed to allow a human-like range of motion and includes a clavicle linkage intended to better represent the human shoulder interaction with shoulder belt restraints.[62] The spine of the THOR–50M ATD has two flexible elements, one in the thoracic spine and one in the lumbar spine, which are intended to allow human-like spinal kinematics in both frontal and oblique loading conditions.[63] The pelvis was designed to represent human pelvis bone structure to better represent lap belt interaction,[64] [65] and the pelvis flesh was designed to represent uncompressed geometry to allow human-like interaction of the pelvis flesh with the vehicle seat.[66]

J., Kent, R., Kuppa, S., & Bostrom, O., ''Occupant Restraint in the Rear Seat: ATD Responses to Standard and Pre-tensioning, Force-limiting Belt Restraints,'' *Annals of Advances in Automotive Medicine, 52:*141–54, Oct 2008; Hu, J., Fischer, K., & Adler, A., ''Rear Seat Occupant Protection: Safety Beyond Seat Belts,'' Society of Automotive Engineers Government/Industry Meeting, January 2015. [*www.nhtsa.gov/DOT/NHTSA/NVS/Public%20Meetings/SAE/2015/2015SAE-Saunders-Adv OccupantProtection.pdf*]; Cyliax, B., Scavnicky, M., Mueller, I., Zhao, J., & Hiroshi, A., ''Advanced Adaptive Restraints Program: Individualization of Occupant Safety Systems,'' Society of Automotive Engineers Government/Industry Meeting, January 2015. [*www.nhtsa.gov/DOT/NHTSA/NVS/Public%20Meetings/SAE/2015/2015SAE-Cyliax-AARP.pdf*]; Shaw, G., Lessley, D., Bolton, J., & Crandall, J., ''Assessment of the THOR and Hybrid III Crash Dummies: Steering Wheel Rim Impacts to the Upper Abdomen,'' SAE Technical Paper 2004–01–0310, 2004, doi:10.4271/2004–01–0310.

[52] Schneider, L. W., Robbins, D. H., Pflug, M. A., & Snyder, R. G., ''Development of Anthropometrically Based Design Specifications for an Advanced Adult Anthropomorphic Dummy Family; Volume 1-Procedures, Summary Findings and Appendices,'' U.S. Department of Transportation, DOT–HS–806–715, 1985.

[53] Robbins, D. H., ''Development of Anthropometrically Based Design Specifications for an Advanced Adult Anthropomorphic Dummy Family; Volume 2-Anthropometric Specifications for mid-Sized Male Dummy; Volume 3-Anthropometric Specifications for Small Female and Large Male Dummies,'' U.S. Department of Transportation, DOT–HS–806–716 & 717, 1985.

[54] White, R. P., Zhoa, Y., Rangarajan, N., Haffner, M., Eppinger, R., & Kleinberger M. ''Development of an Instrumented Biofidelic Neck for the NHTSA Advanced Frontal Test Dummy,'' The 15th International Technical Conference on the Enhanced Safety of Vehicles, Paper No. 96–210–W–19, 1996.

[55] Hoofman, M., van Ratingen, M., & Wismans, J., ''Evaluation of the Dynamic and Kinematic Performance of the THOR Dummy: Neck Performance,'' Proceeding of the International Conference on the Biomechanics of Injury (IRCOBI) Conference, pp. 497–512, 1998.

[56] Kent, R., Shaw, C. G., Lessley, D. J., Crandall, J. R. & Svensson, M. Y, ''Comparison of Belted Hybrid III, THOR, and Cadaver Thoracic Responses in Oblique Frontal and Full Frontal Sled Tests,'' Proc. SAE 2003 World Congress. Paper No. 2003–01–0160, 2003.

[57] National Highway Traffic Safety Administration, ''Biomechanical Response Requirements of the THOR NHTSA Advanced Frontal Dummy, Revision 2005.1,'' Report No: GESAC–05–03, U.S. Department of Transportation, Washington, DC, March 2005. [*www.nhtsa.gov/DOT/NHTSA/NVS/Biomechanics%20&%20Trauma/THOR-NT%20Advanced%20Crash%20Test%20Dummy/thorbio05_1.pdf.*]

[58] Yoganandan, N., Pintar, F., Rinaldi, J., ''Evaluation of the RibEye Deflection Measurement System in the 50th Percentile Hybrid III Dummy.'' National Highway Traffic Safety Administration, DOT–HS–811–102, March 2009.

[59] Morgan, R. M., Eppinger, R. H., Haffner, M. P., Yoganandan, N., Pintar, F. A., Sances, A., Crandall, J. R., Pilkey, W. D., Klopp, G. S., Kallieris, D., Miltner, E., Mattern, R., Kuppa, S. M., & Sharpless, C. L., ''Thoracic Trauma Assessment Formulations for Restrained Drivers in Simulated Frontal Impacts,'' Proc. 38th Stapp Car Crash Conference, pp. 15–34. Society of Automotive Engineers, Warrendale, PA., 1994.

[60] Kuppa, S., & Eppinger, R., ''Development of an Improved Thoracic Injury Criterion,'' Proceedings of the 42nd Stapp Car Crash Conference, SAE No. 983153, 1998.

[61] Parent, D., Craig, M., Ridella, S., & McFadden, J. ''Thoracic Biofidelity Assessment of the THOR Mod Kit ATD,'' The 23rd Enhanced Safety of Vehicles Conference, Paper No. 13–0327, 2013.

[62] Törnvall, F. V., Holmqvist, K., Davidsson, J., Svensson, M. Y., HÅland, Y., & Öhrn, H., ''A New THOR Shoulder Design: A Comparison with Volunteers, the Hybrid III, and THOR NT,'' Traffic Injury Prevention, 8:2, 205–215, 2007.

[63] Haffner, M., Rangarajan, N., Artis, M., Beach, D., Eppinger, R., & Shams, T., ''Foundations and Elements of the NHTSA THOR Alpha ATD Design,'' The 17th International Technical Conference for the Enhanced Safety of Vehicles, Paper No. 458, 2001.

[64] Reynolds, H., Snow, C., & Young, J., ''Spatial Geometry of the Human Pelvis,'' U.S. Department of Transportation, Technical Report No. FAA–AM–82–9, 1982.

[65] Haffner, M., Rangarajan, N., Artis, M., Beach, D., Eppinger, R., & Shams, T., ''Foundations and Elements of the NHTSA THOR Alpha ATD Design,'' The 17th International Technical Conference for the Enhanced Safety of Vehicles, Paper No. 458, 2001.

[66] Shams, T., Rangarajan, N., McDonald, J., Wang, Y., Platten, G., Spade, C., Pope, P., & Haffner, M., ''Development of THOR NT: Enhancement of THOR Alpha—the NHTSA Advanced Frontal Dummy,'' The 19th International Technical Conference for the

THOR–50M ATD has instrumentation that can be used to predict injury risk to the head, neck, thorax, abdomen, pelvis, upper leg, and lower leg. Coupled with improved biofidelity in these areas, THOR–50M ATD has the potential to measure meaningful and appropriate sources of injury, especially in offset or oblique loading scenarios.

Evidence of the ability of the THOR–50M ATD to simulate occupant kinematics and predict injury risk has been demonstrated through a combination of field studies and fleet testing in the oblique crash test mode. NHTSA conducted two field studies to examine the sources of injury and fatality in small overlap and oblique crashes using the Crash Injury Research and Engineering Network (CIREN) and NASS–CDS databases.[67] [68] The body regions that showed the highest average injury risk as predicted by the THOR–50M ATD in fleet testing were also those regions that showed the highest incidence of injury in the 2011 field study by Rudd et al.: [69] knee-thigh-hip, lower extremity, head, and chest. Head and chest contacts observed in the fleet testing generally aligned with the sources of the most severe injuries indicated in the 2013 field study by Rudd. A majority of the fatalities in the field study were sourced to the head or chest, body regions which were also predicted to have a high risk of AIS 3+ injury in fleet testing. Additionally, Rudd (2011) observed that over half of the pelvis injuries occurred in the absence of a femur shaft fracture, which was mirrored in the fleet testing in that the average risk of acetabulum fracture was higher than the average risk of femur fracture.

Because of its improved biofidelity and injury prediction capabilities, the THOR–50M ATD is more sensitive to the performance of different restraint systems. In a study of belt-only, force-limited belt plus air bag, and reduced force force-limited belt plus air bag restraint conditions in a frontal impact sled test series, the THOR–50M was able to differentiate between both crash severity and restraint performance.[70]

iii. Injury Criteria and Risk Curves

To assess injury in any crash test that the THOR–50M ATD is used in, NCAP intends to use many of the injury criteria and risk curves that have been used in NHTSA research testing as previously published,[71] with some modifications. These preliminary injury criteria and risk curves are described below and summarized in Appendix II of this document. The agency is seeking comment on all aspects of the following:

HEAD—NHTSA intends to use the head injury criterion (HIC_{15}) as a metric for assessing head injury risk in frontal crashes. It is currently in use in FMVSS No. 208 and frontal NCAP tests.[72] [73] As described in the 2008 NCAP Final Decision Notice, the risk curve associated with HIC_{15} in frontal NCAP testing represents a risk of AIS 3+ injury. However, while HIC_{15} injury assessment values in frontal NCAP testing have continued to decrease over time as have the field incidence of skull and facial fractures, the incidence of traumatic brain injury in frontal crashes has not decreased at a similar rate.[74] This may be because the HIC_{15} criterion only addresses linear acceleration of the head, which does not completely describe the motion of and subsequent injury risk to the brain. To assess the risk of brain injury due to rotation of the head, Takhounts (2013) developed a kinematically based brain injury criterion (BrIC). BrIC is calculated by combining the angular velocities of the head about its three local axes compared to directionally dependent critical values. BrIC was one of many brain injury correlates that were considered and was found to have the highest correlation to two strain metrics measured in the brain. These strain metrics, cumulative strain and maximum principal strain, are the mechanical measures that have been shown to be directly associated with brain injury potential.[75]

NECK—NHTSA intends to use a modified, THOR-specific version of the neck injury criterion (Nij) as a metric for assessing neck injury in frontal crashes. Two approaches are being considered to address this difference:

(a) Update Nij critical values. The formulation of Nij would be retained, but the critical values would be updated to specifically represent the THOR–50M ATD. In a presentation to the Society of Automotive Engineers (SAE) THOR Evaluation Task Group, Nightingale et al. proposed critical values for the THOR ATD based on age-adjusted post-mortem human surrogate cervical spine tolerance data.[76] These critical values were based on measurements from the upper neck load cell alone: 2520 N in tension, 3640 N in compression, 48 Nm in flexion, and 72 Nm in extension. Dibb et al. recognized this as a conservative estimate of injury risk because it did not account for additional resistance to tension provided by neck musculature.[77]

(b) Implement a THOR-specific injury criterion. NHTSA has conducted research to evaluate the neck of the THOR–50M ATD head and neck in a wide array of loading conditions. These data would be used to develop a cervical osteoligamentous spine injury criterion (Cervical Nij or CNij).

CHEST—NHTSA intends to use one or more multi-point thoracic injury criteria to predict chest injury. A relationship between chest deformation and injury risk was determined through a series of matched-pair sled tests conducted at the University of

Enhanced Safety of Vehicles, Paper No. 05–0455, 2005.

[67] Rudd, R., Scarboro, M., & Saunders, J., ''Injury Analysis of Real-World Small Overlap and Oblique Frontal Crashes,'' The 22nd International Technical Conference for the Enhanced Safety of Vehicles, Paper No. 11–0384, 2011.

[68] Rudd, R., ''Characteristics of Injuries in Fatally Injured Restrained Occupants in Frontal Crashes,'' The 23rd International Technical Conference for the Enhanced Safety of Vehicles, Paper No. 13–0349, 2013.

[69] Saunders, J., Craig, M., & Parent, D., ''Moving Deformable Barrier Test Procedure for Evaluating Small Overlap/Oblique Crashes,'' SAE International Journal of Commercial Vehicles, 5(2012–01–0577), 172–195, 2012.

[70] Sunnevång, C., Hynd, D., Carroll, J., & Dahlgren, M., ''Comparison of the THORAX Demonstrator and HIII Sensitivity to Crash Severity and Occupant Restraint Variation,'' Proceedings of the 2014 IRCOBI Conference, Paper No. IRC–14–42, 2014.

[71] Saunders, J., Parent, D., & Ames, E., ''NHTSA Oblique Crash Test Results: Vehicle Performance and Occupant Injury Risk Assessment in Vehicles with Small Overlap Countermeasures,'' The 24th International Technical Conference for the Enhanced Safety of Vehicles, Paper No. 15–0108, 2015.

[72] Eppinger, R., Sun, E., Bandak, F., Haffner, M., Khaewpong, N., Maltese, M., & Saul, R., ''Development of Improved Injury Criteria for the Assessment of Advanced Automotive Restraint Systems II,'' NHTSA Docket No. NHTSA–1999–6407–5, 1999.

[73] See 73 FR 40016. Docket No. NHTSA–2006–26555. Available at *https://federalregister.gov/a/E8-15620.*

[74] Takhounts, E. G., Hasija, V., Moorhouse, K., McFadden, J., & Craig, M., ''Development of Brain Injury Criteria (BrIC)'', Proceedings of the 57th Stapp Car Crash Conference, Orlando, FL, November 2013.

[75] Takhounts, E., Eppinger, R., Campbell, J., Tannous, R., Power, Erik., & Shook, L., ''On the Development of the SIMon Finite Element Head Model.'' Stapp Car Crash Journal, Vol. 47 (October 2003), pp. 107–33.; Takhounts, E., Ridella, R., Hasija, V., Tannous, R., Campbell, J., Malone, D., Danelson, K., Stitzel, J., Rowson, S., & Duma, S., ''Investigation of Traumatic Brain Injuries Using the Next Generation of Simulated Injury Monitor (SIMon) Finite Element Head Model,'' Stapp Car Crash Journal, Vol. 52 (November 2008), pp 1–31.

[76] Nightingale, R., Ono, K., Pintar, F., Yoganandan, N., & Martin, P., ''THOR Head and Neck IARVs,'' SAE THOR Evaluation Task Group, 2009.

[77] Dibb, A., Nightingale, R., Chauncey, V., Fronheiser, L., Tran, L., Ottaviano, D., & Myers B., ''Comparative Structural Neck Responses of the THOR–NT, Hybrid III, and Human in Combined Tension-Bending and Pure Bending,'' Stapp Car Crash Journal, 50: 567–581, 2006.

Virginia.[78] Sled tests were conducted in 12 conditions using the THOR–50M ATD, for which thoracic biofidelity has been demonstrated (Parent, 2013). The matched set of post-mortem human surrogate (PMHS) tests included 38 observations on 34 PMHS (four PMHS were subjected to a low-speed, non-injurious loading condition before injurious testing). Incidence of injury was quantified as AIS 3+ thoracic injury to the PMHS, which represents three or more fractured ribs based on the 2005 (update 2008) version of AIS. Using the peak resultant deflection, measured at the maximum of the four thoracic measurement locations on the THOR–50M rib cage, and the incidence of PMHS injury in same test condition,[79] an injury risk function was developed.

ABDOMEN—NHTSA intends to use a measurement based on percent compression to predict abdominal injury. This is a new area for NHTSA, because THOR is the first frontal ATD to potentially be used in consumer information testing that measures dynamic abdominal deflection. Kent et al. examined several predictors of abdominal injury using a porcine surrogate, and found percent compression to be the best injury discriminator out of the considered metrics.[80] A risk function was developed to relate the percent compression to the risk of AIS 3+ abdominal injury. Percent compression can be measured on the THOR–50M ATD by dividing the maximum of the left and right peak abdominal deflection measurements by the undeformed depth of the abdomen measured at the IR–TRACC attachment points, or 238.4 millimeters (mm) (9.4 inches (in)).

PELVIS—NHTSA intends to use an acetabulum load criteria to assess potential pelvis injuries with the THOR ATD. Rudd 2011 demonstrated that pelvis injuries have been shown to occur in the absence of femur fractures, and as shown in Martin (2011), the THOR–50M ATD is able to measure the load at the interface between the greater trochanter and the acetabulum to assess the risk of these types of injuries. Rupp et al. (2009) developed a post-mortem human surrogate injury risk function to relate the force transmitted to the hip, the stature of the occupant, the hip flexion angle, and the hip abduction angle to the risk of a hip fracture.[81] To relate this risk function to the THOR–50M ATD, three substitutions are made. First, an occupant stature of 178 centimeters (70 inches) is used to represent a 50th percentile male occupant. Second, since the THOR cannot record dynamic hip angles, the hip angles are estimated to represent the typical posture at the time of peak femur load in full frontal crashes (30 degrees of flexion and 15 degrees of abduction). Third, the force measured at the THOR acetabulum must be related to the force measured at the hip of the post-mortem human surrogates used to develop the risk function. Martin et al. (2011) demonstrated that a scaling ratio of 1.3 could be used to relate the acetabulum force measured by THOR–NT to the PMHS acetabulum force.[82] However, this scaling ratio may not be appropriate for the THOR–50M ATD because the biofidelity of the femur was updated in the Modification Kit.[83]

UPPER LEG—NHTSA intends to use peak femur axial force as a metric for assessing femur injury risk in frontal crashes. It is currently used in FMVSS No. 208 and frontal NCAP. The THOR–50M ATD includes a femur compressive element that allows for a human-like response under axial compression.[84] Thus, the human injury risk function to relate axial femur force to risk of AIS 2+ and 3+ injury can be used directly.[85]

LOWER LEG—NHTSA intends to use injury risk curves developed for the human lower extremity and applied to the lower extremity hardware of the THOR–50M ATD.[86] [87] NHTSA developed injury risk curves for the prediction of tibia plateau fractures using the axial force measured by the upper tibia load cell; tibia/fibula shaft fractures using the Revised Tibia Index calculated using measurements from the upper and lower tibia load cells; calcaneus, talus, ankle, and midfoot fractures using the axial force measured by the lower tibia load cell; and malleolar fractures and ankle ligament injuries using the rotation measured by the ankle potentiometer or calculated ankle moment.

c. Hybrid III 5th Percentile Female ATD (HIII–5F) w/RibEye™

NHTSA is considering updating the HIII–5F ATD currently used in frontal NCAP with new RibEye™ instrumentation for measuring chest deflection. The background and detail for this consideration are explained below.

The HIII–5F ATD was initially developed in 1988 by a collaboration among First Technology Safety Systems and the SAE Biomechanics Subcommittees, the Centers for Disease Control and Prevention (CDC), and the Ohio State University.[88] Several updates were made to the device through the late 1980s and 1990s to improve its ability to interact with modern restraints.[89]

NHTSA's regulatory use of the HIII–5F ATD began in 1996 when the agency announced its comprehensive plan for reducing the dangers to vehicle occupants from deploying frontal air bags.[90] The agency was also required to respond to section 7103 of the Transportation Equity Act for the 21st Century (TEA21) enacted in 1998.[91] These directives resulted in the issuance of a final rule in 2000 that required advanced air bag protection for a variety of occupant sizes, including smaller persons represented by the HIII–5F

[78] Crandall, J., ''Injury Criteria Development: THOR Metric SD–3 Shoulder Advanced Frontal Crash Test Dummy,'' NHTSA Biomechanics Database, Report b11117–1, September 2013.

[79] Saunders, J., Parent, D., & Ames, E., ''NHTSA Oblique Crash Test Results: Vehicle Performance and Occupant Injury Risk Assessment in Vehicles with Small Overlap Countermeasures,'' The 24th International Technical Conference for the Enhanced Safety of Vehicles, Paper No. 15–0108, 2015.

[80] Kent, R., Stacey, S., Kindig, M., Woods, W., Evans, J., Rouhana, S., Higuchi, K., Tanji, H., St. Lawrence, S., & Arbogast, K., ''Biomechanical Response of the Pediatric Abdomen, Part 2: Injuries and Their Correlation with Engineering Parameters,'' Stapp Car Crash Journal, Vol. 52, November 2008.

[81] Rupp, J. D., Flannagan, C. A., & Kuppa, S. M., ''Development of an injury risk curve for the hip for use in frontal impact crash testing,'' Journal of Biomechanics 34(3):527–531, 2010.

[82] Martin, P. G. & Scarboro, M., ''THOR–NT: Hip Injury Potential in Narrow Offset and Oblique Frontal Crashes,'' The 22nd International Technical Conference for the Enhanced Safety of Vehicles, Paper No. 11–0234, 2011.

[83] Ridella, S. & Parent, D., ''Modifications to Improve the Durability, Usability, and Biofidelity of the THOR–NT Dummy,'' The 22nd International Technical Conference for the Enhanced Safety of Vehicles Conference, Paper No. 11–0312, 2011.

[84] Ridella, S. & Parent, D., ''Modifications to Improve the Durability, Usability, and Biofidelity of the THOR–NT Dummy,'' The 22nd International Technical Conference for the Enhanced Safety of Vehicles Conference, Paper No. 11–0312, 2011.

[85] Kuppa, S., Wang, J., Haffner, M., & Eppinger, R., ''Lower Extremity Injuries and Associated Injury Criteria,'' The 17th International Technical Conference for the Enhanced Safety of Vehicles, Paper No. 457, 2001.

[86] Ibid.

[87] Kuppa, S., Haffner, M., Eppinger, R., & Saunders, J., ''Lower Extremity Response And Trauma Assessment Using The THOR-Lx/HIIIr And The Denton Leg In Frontal Offset Vehicle Crashes,'' The 17th International Technical Conference for the Enhanced Safety of Vehicles, Paper No. 456, 2001.

[88] Humanetics Innovative Solutions, ''Hybrid III 5th Female Dummy—880105–000–H,'' August 2015. [*www.humaneticsatd.com/crash-test-dummies/frontal-impact/hybrid-iii-5th*].

[89] Ibid.

[90] National Highway Traffic Safety Administration. (November 22, 1996). NHTSA Announces Comprehensive Plan to Improve Air Bag Technology and Reduce Air Bag Dangers [Press Release]. Retrieved from *http://stnw.nhtsa.gov/nhtsa/announce/press/PressDisplay.cfm?year=1996&filename=pr112296a.html*.

[91] ''Transportation Equity Act for the 21st Century,'' Pub. L. 105–178, sec. 7103, 112 Stat. 107 (June 9, 1998).

ATD.[92] That rulemaking was the first requiring vehicle manufacturers to certify their products to the occupant crash protection standard, FMVSS No. 208, using the small female dummy in dynamic vehicle tests (both belted and unbelted). In MY 2011 vehicles, the agency began testing with the HIII–5F ATD in the right front passenger's seat of NCAP's 56 km/h (35 mph) full frontal rigid barrier test.[93]

In recent studies using data from the FARS and NASS–CDS databases, researchers have found that in a comparable crash, belted females have higher risk of injury and death overall than belted males, as well as higher chest injury risk specifically.[94] Differing injury patterns between males and females also suggest differences in restraint interaction and effectiveness. For example, using NASS–CDS data from 1997 to 2011, Parenteau et al. (2013) showed that females have higher risk of belt- and air bag-sourced chest injuries.[95] NHTSA also found that females had a higher percentage of injuries sourced to the air bag in frontal collisions.[96] Thus, it remains important to assess the risk of injury to smaller female occupants using the currently available HIII–5F ATD.

Similar to what was discussed above for the THOR–50M, the agency has identified an opportunity to improve on the type of thoracic injury data it collects when using the HIII–5F ATD in full frontal NCAP tests. In an effort to improve the quality of thoracic deflection measurements collected by ATDs, Boxboro Systems developed a set of optical thoracic instrumentation known as the RibEye™.[97] The RibEye™ system is comprised of up to 12 light emitting diodes (LEDs) which are mounted internally to the ribs of the dummy. Two detectors that allow the system to measure deflections in both the x- and y-directions receive light from the LEDs. One advantage that the RibEye™ system has over traditional single-point potentiometers is the ability to assess asymmetric loading of the thorax rather than just a one dimensional deflection at the sternum.[98]

The agency intends to conduct further research on the HIII–5F ATD with the RibEye™ instrumentation. Research findings indicate that the multi-point thoracic deflection measurement capability of the RibEye™ system has the potential to record higher and potentially more meaningful (with respect to the effects of belt routing) chest deflections than a single potentiometer at the sternum.[99] The agency intends to evaluate its merit in discriminating the multi-point thoracic deflection measurement capability of the RibEye™ amongst vehicle performance in the full frontal NCAP environment.

NHTSA has previously acknowledged that there is a need for greater understanding of the rear seat environment.[100] In a double-paired comparison study using FARS data, NHTSA research indicated that restrained occupants older than 50 years were protected better in the front row than in the rear row.[101] A follow-up parametric study indicated that while there are many design challenges that must be considered, certain rear seat occupants could benefit from the addition of advanced restraint technology like pretensioners and load limiters.[102] NHTSA has continued its study of potential restraint countermeasures for the rear seat vehicle environment through research initiatives.[103] While both occupancy and injury rates for the rear seat are low when compared to the front seat, there may be an opportunity in NCAP to better understand the needs of rear seat occupants, especially in consideration of modern vehicles that are lighter and more compact than their predecessors.

Accordingly, the agency intends to conduct research tests with a HIII–5F dummy in the rear seat of full frontal tests to determine whether or not to include this ATD in the rear seat of full frontal NCAP tests. Including testing of an ATD in the rear seat of full frontal tests would be consistent with the testing done in other international vehicle safety consumer information programs such as Euro NCAP and Japan NCAP.[104]

NHTSA is also undertaking research efforts to procure and evaluate a 5th percentile female version of the THOR ATD.[105] NHTSA expects to acquire several of these devices and conduct testing using them within the next few years. A 5th percentile female THOR ATD would have instrumentation that is similar to the THOR–50M ATD, including many improved measurement capabilities like multi-point chest and abdominal deflections.[106] Its biofidelity and kinematics are expected to be an improvement compared to the HIII–5F ATD, especially in the context of rear

[92] See 65 FR 30680. Docket No. NHTSA 00–7013 Notice 1. Available at *https://federalregister.gov/a/00-11577*.

[93] See 73 FR 40016. Docket No. NHTSA–2006–26555. Available at *https://federalregister.gov/a/E8-15620*; Also see 73 FR 79206. Docket No. NHTSA–2006–26555. *https://federalregister.gov/a/E8-30701*.

[94] Bose D., Segui-Gomez, M., & Crandall J. ''Vulnerability of Female Drivers Involved in Motor Vehicle Crashes: An Analysis of US Population at Risk,'' American Journal of Public Health 101(12):2368–2373, 2011; Parenteau, C. S., Zuby, D., Brolin, K. B., et al. ''Restrained male and female occupants in frontal crashes: Are we different?'' Proceedings of the International Research Council on Biomechanics of Injury (IRCOBI) Conference. Paper IRC–13–98, 2013; Kahane, C. J. ''Injury vulnerability and effectiveness of occupant protection technologies for older occupants and women''. National Highway Traffic Safety Administration. Report No. DOT HS 811 766, 2013.

[95] Parenteau, C. S., Zuby, D., Brolin, K. B., et al. ''Restrained male and female occupants in frontal crashes: Are we different?'' Proceedings of the International Research Council on Biomechanics of Injury (IRCOBI) Conference. Paper IRC–13–98, 2013.

[96] Kahane, C. J. ''Injury vulnerability and effectiveness of occupant protection technologies for older occupants and women''. National Highway Traffic Safety Administration. Report No. DOT HS 811 766, 2013.

[97] Handman, D. ''Multi-point position measuring and recording system for anthropomorphic test devices.'' U.S. Patent Number 7508530B1. 24 March 2009.

[98] Yoganandan, N., Pintar, F., Rinaldi, J., ''Evaluation of the RibEye Deflection Measurement System in the 50th Percentile Hybrid III Dummy.'' National Highway Traffic Safety Administration, DOT HS 811 102, March 2009.

[99] Eggers, A. & Adolph, T., ''Evaluation of the Thoracic Measurement System 'RibEye' in the Hybrid III 50% in Frontal Sled Tests,'' The 22nd Enhanced Safety of Vehicles Conference, Paper Number 11–0190, 2011; Eggers, A., Eickhoff, B., Dobberstein, J., Zellmer, H., & Adolph, T., ''Effects of Variations in Belt Geometry, Double Pretensioning and Adaptive Load Limiting on Advanced Chest Measurements of THOR and Hybrid III,'' IRCOBI Conference, IRC–14–40, 2014.

[100] See 78 FR 20597. Docket No. NHTSA–2012–0180. Available at *https://federalregister.gov/a/2013-07766*.

[101] Kuppa, S., Saunders, J., & Fessahaie, O., ''Rear Seat Occupant Protection in Frontal Crashes,'' The 19th Enhanced Safety of Vehicles Conference, Paper No. 05–0212, 2005.

[102] Kent, R., Forman, J., Parent, D., & Kuppa, S., ''Rear Seat Occupant Protection in Frontal Crashes and its Feasibility,'' The 20th Enhanced Safety of Vehicles Conference, Paper No. 07–0386, 2007.

[103] Hu, J., & Saunders, J. ''Rear Seat Occupant Protection: Safety Beyond Seat Belts.'' SAE Government/Industry Meeting, January 21, 2015. Available at *www.nhtsa.gov/DOT/NHTSA/NVS/Public%20Meetings/SAE/2015/2015SAE-Saunders-AdvOccupantProtection.pdf*.

[104] European New Car Assessment Programme, ''Full Width Frontal Impact Test Protocol,'' Version 1.0.1, April 2015. [*http://euroncap.blob.core.windows.net/media/17000/euro-ncap-frontal-fw-test-protocol-v101-april-2015.pdf*]; European New Car Assessment Programme, ''Assessment Protocol—Adult Occupant Protection,'' Version 7.0.2, April 2015. [*http://euroncap.blob.core.windows.net/media/16999/euro-ncap-assessment-protocol-aop-v702-april-2015.pdf*]; Japan NCAP, ''Collision Safety Performance Tests,'' Accessed August 18, 2015. [*www.nasva.go.jp/mamoru/en/assessment_car/crackup_measure.html*].

[105] National Highway Traffic Safety Administration, ''THOR 5th Female ATD.'' Accessed August 17, 2015.

[106] Ebert, S. & Reed, M., ''Anthropometric Evaluation of THOR–05F.'' National Highway Traffic Safety Administration, UMTRI–2013–12, April 2013; Shams, T., Huang, T.J., Rangarajan, N., Haffner, M., ''Design Requirements for a Fifth Percentile Female Version of the THOR ATD,'' The 18th Enhanced Safety of Vehicles Conference, Paper Number 421, 2003.

seat frontal impact testing. At this time, the THOR 5th has not been refined to a full production level, so it is not yet a candidate for consideration over the HIII–5F in frontal NCAP tests. Thus, the agency intends to use the HIII–5F ATD in this NCAP upgrade. It also intends to use the formulae and risk curves presented in Appendix III of this document to assess the injury risk to this size occupant.

Though three modes of potential neck injury are assessed for the HIII–5F dummy, the maximum neck injury potentials for both dummies under the current frontal NCAP have all resulted from the calculation of Nij.[107] The Nij criterion has been used to assess injury in frontal crashes conducted by the agency both in a regulatory context and in frontal NCAP since the 2011 model year.[108] NCAP has seen a general decline in HIII–5F ATD Nij values, which has helped result in higher right front passenger star ratings.[109]

The current Nij risk function used in NCAP with HIII–5F ATD produces a risk value of 3.8 percent when Nij equals zero. To address this, two corrections have been made to generate the HIII–5F Nij risk curve being included in this notice. First, revised Nij experimental data[110] were used. Second, given the updated Nij values and paired injury outcomes, survival analysis with a Weibull distribution was used produce an AIS 3+ risk curve that passes through 0.0% for Nij equal to zero.

B. Side Crashworthiness

1. Real-World Side Crash Data

In support of this RFC notice, a review of 10 years' worth (2004–2013) of National Automotive Sampling System—Crashworthiness Data System (NASS–CDS) data was conducted to understand side impact crashes in the real world. For light vehicles in this analysis, crashes must have been representative of those covered by the current FMVSS No. 214; that is, (1) they must have involved another light vehicle or tall, narrow object such as a tree or pole; (2) the direction of the highest delta-V impact must have been between 7 and 11 o'clock for left-side impacts and between 1 and 5 o'clock for right-side impacts; and (3) the lateral delta-V must have been between 0–25 mph (0–40.2 km/hr). Only tow-away, non-rollover vehicles were included. Shallow-side (sideswipe) impacts were excluded, as were impacts with the second-highest delta-V known to be to the top of the vehicle.[111] Also excluded were impacts with the second-highest delta-V known to be to the rear, front, or undercarriage of the vehicle with a non-shallow or unknown extent of crush. At least one occupant must have received a MAIS 2+ injury or must have died within 30 days of the crash. Furthermore, at least one such injured occupant must have been seated in the front or rear rows of vehicle-to-vehicle crashes or the front row of vehicle-to-pole crashes. All occupants younger than 13 in the front row or 8 in the rear row or those completely ejected from the vehicle were excluded. If an occupant sustained a head injury, it must have been to the brain, skull, scalp, or face.

All data presented for the side NCAP section is in terms of unadjusted values and has been weighted to a certain extent. The data has been weighted for frequency but not adjusted for various factors, such as recent rulemakings or increased belt use. It is critical to note that, as the final population estimates to be presented in the Final Notice will be adjusted for these factors, the estimates presented in this RFC notice are preliminary and are subject to change.

This preliminary analysis of crashes representing FMVSS No. 214 conditions showed an estimated 9,180 side impact crashes involving light vehicles occurred annually, 371 (4%) of which involved a tree or pole and 8,809 (96%) of which involved another light vehicle. In these side impact crashes, there were an estimated 384 fatalities and 9,276 moderately-to-critically injured (AIS 2–5) occupants each year. There were an estimated 50,606 total injuries sustained yearly during the review period with each occupant sustaining, on average, about five different injuries. All fatal injuries were sustained in outboard seating positions; when excluding middle seat occupants, there were 9,229 moderately-to-critically injured occupants yearly. Further data gathered from this study will be discussed in relevant subsections later in this RFC notice.

2. Current Side NCAP Program

Since its introduction into NCAP in 1996, the side NCAP MDB test has been a staple of the program's crash-testing effort. This side test, which, except for speed, is the same as the MDB test included in FMVSS No. 214, simulates a 90-degree intersection-style crash. Test speed in the side NCAP MDB test is 61.9 km/h (38.5 mph), which is 8 km/h (5 mph) faster than the speed specified in FMVSS No. 214.

The side NCAP MDB test was last upgraded in MY 2011 to include new test dummies and advanced injury criteria. At that time, an ES–2re 50th percentile male dummy and a SID–IIs 5th percentile female dummy were chosen to replace the 50th percentile Side Impact Dummy with Hybrid III head and neck (SID–H3) in the driver's seat and rear passenger's seat, respectively. These same dummies have also been specified for use in the FMVSS No. 214 side MDB test since the 2007 Final Rule. The FMVSS No. 214 injury criteria adopted for the ES–2re dummy were to address head (HIC_{36}), chest (thoracic rib deflection), abdominal (combined abdominal force), and pelvic (pubic symphysis force) injuries. Injury criteria adopted for the SID–IIs ATD were to address head (HIC_{36}), lower spine (lower spine resultant acceleration), and pelvic (combined pelvic force) injuries. NCAP uses injury risk curves to assess the level of injury risk for rating purposes. For the ES–2re dummy, NCAP uses injury risk curves for all four body regions addressed in the regulation. NCAP uses only the head and pelvis regions for rating SID–IIs performance because there was no valid lower spine acceleration risk curve available at the time of the upgraded program.

The current side NCAP program also includes an oblique vehicle-to-pole test which was introduced in MY 2011 when the program was last upgraded.[112] Similar to the side MDB crash test, NCAP's side pole crash test was based on the FMVSS No. 214 side pole test, which was adopted into the standard in 2007.[113] This test is designed to simulate a side impact crash involving a tree or utility pole. In both the side NCAP test and the FMVSS No. 214

[107] Park, B., Rockwell, T., Collins, L., Smith, C., Aram, M., ''The Enhanced U.S. NCAP: Five Years Later,'' The 24th International Technical Conference for the Enhanced Safety of Vehicles Conference, Paper Number 15–0314, 2015.

[108] Eppinger, R., Sun, E., Bandak, F., Haffner, M., Khaewpong, N., Maltese, M., Saul, R., ''Development of Improved Injury Criteria for the Assessment of Advanced Automotive Restraint Systems II,'' NHTSA Docket No. NHTSA–1999–6407–5, 1999.

[109] Park, B., Rockwell, T., Collins, L., Smith, C., Aram, M., ''The Enhanced U.S. NCAP: Five Years Later,'' The 24th International Technical Conference for the Enhanced Safety of Vehicles Conference, Paper Number 15–0314, 2015.

[110] Mertz, H.J., & Prasad, P., 2000. ''Improved neck injury risk curves for tension and extension moment measurements of crash dummies.'' Proceedings of the 44th Stapp Car Crash Conference, Atlanta, GA.

[111] Impacts with the second-highest delta-V known to be to the top of the vehicle were excluded as this ensures that injuries are sustained from the primary side impact.

[112] See 73 FR 40016. Docket No. NHTSA–2006–26555. Available at *https://federalregister.gov/a/E8-15620.*

[113] See 72 FR 51908. Docket No. NHTSA–29134. Available at *https://federalregister.gov/a/07-4360.*

compliance test, the test vehicle is towed at 32 km/h (20 mph) into a rigid pole.[114] The driver dummy specified for NCAP's side pole test is a 5th percentile female SID–IIs dummy, whereas both the 5th percentile female SID–IIs dummy and the 50th percentile male ES–2re dummy are specified in FMVSS No. 214.

Vehicle manufacturers have been responsive to the program changes implemented in MY 2011. A review of star rating data from NCAP's first model year of testing compared to the most recent model year (MY 2015) shows that average star ratings for the driver in the pole test, as represented by the 5th percentile SID–IIs dummy, have improved 19 percent. Average ratings for both the driver and the rear passenger in the MDB test have increased 11 percent since MY 2011. Star ratings, in general, are now quite high for side impact protection. Most vehicles achieved 5 stars in both side impact crash tests in MY 2015.

As a result, current side NCAP star ratings are reaching a point at which they are no longer providing distinct discrimination between vehicle models. To continually promote further advancements in side occupant protection, changes to the side NCAP program are once again appropriate. Accordingly, NHTSA intends to introduce a new, advanced, average-size side impact test dummy that is capable of measuring additional injuries in side impact crashes.

3. Planned Upgrade

a. Side MDB Test

Today, the agency announces its intention to once again enhance the side MDB test for the NCAP safety ratings program in light of the aforementioned limitations on discriminating vehicles and the agency's recent analysis of real-world data showing a continued need to address side impact protection. NHTSA's preliminary estimate of real-world crash data mentioned previously indicates that an estimated 8,809 side impact vehicle-to-vehicle crashes occurring annually had at least one occupant receiving an injury of MAIS 2 or greater.[115] Each year, about 9,270 front and/or rear seat occupants received moderate-to-fatal injuries, considered to be MAIS 2 to MAIS 6. Ninety-six percent (8,922) of these occupants were seated in the front seat, and the remaining 4 percent (348) were seated in the rear. These occupants received approximately 21,595 separate AIS 2+ injuries each year. For this population, 37 percent of moderate-to-fatal injuries were to the torso, 25 percent were to the head, and 18 percent were to the pelvis.

Although the side MDB test itself will not change,[116] the new WorldSID 50th percentile male (WorldSID–50M) Standard Build Level F (SBL F) dummy will now be specified for the driver's seat instead of the 50th percentile ES–2re male dummy, which is used currently.[117] The WorldSID–50M dummy's increased biofidelity, particularly in the head, shoulder, thorax, and abdominal regions, make this dummy the best choice for evaluating these types of injuries.[118] The WorldSID–50M ATD is more sensitive to oblique loads. This will be discussed further in the WorldSID–50M ATD Biofidelity section, to be found later in this RFC notice.

The SID–IIs 5th percentile female dummy will continue to occupy the near-side rear outboard seat of the test vehicle. For small-stature occupants in the rear outboard seat of vehicle-to-vehicle crashes, 29 percent of AIS 2+ injuries were to the head, 18 percent to the pelvis, 17 percent to the chest, and 16 percent to the abdomen.[119] Fifth-percentile female dummies not only represent small occupants (including vulnerable and older occupants), but they are also appropriately sized surrogates for older children.

The WorldSID 5th percentile female (WorldSID–5F) dummy is currently going through the final stages of development and robustness testing. The WorldSID–5F ATD has improved thorax and abdominal biofidelity. However, as discussed in a later section of this RFC, there are remaining concerns to be addressed before it can be included in the next NCAP upgrade.

b. Side Pole Test

NHTSA's real-world estimates indicate that about 371 side impact vehicle-to-pole crashes occurred annually in which the front seat occupant received an injury of MAIS 2 or greater.[120] These occupants received approximately 1,415 AIS 2+ injuries each year. While the frequency with which side pole crashes occurred is low in comparison to vehicle-to-vehicle crashes, the body regions injured tended to be different than in vehicle-to-vehicle crashes. For this population, nearly half (49%) of the moderate-to-fatal injuries were to the head, followed by injuries to the pelvis (15%), torso (14%), and lower limb (13%).

For the side oblique pole test, the agency will not alter the test itself.[121] Instead, it intends to replace the SID–IIs ATD with the WorldSID–50M ATD in the front struck-side outboard seating position. As mentioned in previous rulemakings, the distribution of injury, severity and types of injury were different in small-stature occupants compared to mid-size to larger occupants.[122] Nearly two-thirds of AIS 2+ injuries for small-stature occupants in narrow-object crashes were to the occupant's head. Other commonly injured body regions were the lower extremities (12%) and pelvis (11%).[123] This differing distribution of injury was one of the reasons that the agency decided to include the SID–IIs ATD in the driver's seat of the existing NCAP oblique pole test.

However, the agency believes it is advantageous to use the most advanced tools available. The WorldSID–50M ATD is able to more accurately assess risk of injuries to occupants due to its improved biofidelity.[124] The WorldSID–50M ATD offers more realistic anthropometry and should lead to improved head protection for real-world occupants. Over four-fifths (82%) of the occupants sustaining MAIS 2+ injuries from pole or tree crashes were between 165 cm (5 ft 5 in) and 180 cm (5 ft 11 in), a size well-represented by the WorldSID–50M ATD.[125] For this population, 35 percent of the AIS 2+ injuries were to the head, 20 percent were to the pelvis, 16 percent were to the chest, and 14 percent were to the lower limbs.

NHTSA's data analysis also supports the need for testing small-stature occupants in the driver seating position. Even though mid-size to larger occupants were injured more frequently

[114] FMVSS No. 214 specifies a range of speeds (26 km/h to 32 km/h, or 16 mph to 20 mph), rather than one target speed as in the side NCAP pole test.

[115] NHTSA's review of NASS–CDS cases; see Real-World Data section.

[116] ''U.S. Department of Transportation National Highway Traffic Safety Administration Laboratory Test Procedure for New Car Assessment Program Side Impact Moving Deformable Barrier Test,'' Docket No. NHTSA–2015–0046, September 2013.

[117] The test will also remain applicable to those vehicles with a (GVWR) of 4,536 kg (10,000 lbs) or less.

[118] See WorldSID–50M Biofidelity section.

[119] NHTSA's review of NASS–CDS cases; see Real-World Data section.

[120] Ibid.

[121] ''U.S. Department of Transportation National Highway Traffic Safety Administration Laboratory Test Procedure for New Car Assessment Program Side Impact Rigid Pole Test,'' Docket No. NHTSA–2015–0046, September 2013.

[122] See 73 FR 40028. Docket No. NHTSA–2006–26555. Available at *https://federalregister.gov/a/E8-15620*.

[123] NHTSA's review of NASS–CDS cases; see Real-World Data section.

[124] Biofidelity and anthropometry of this dummy will be discussed later in this RFC notice.

[125] NHTSA's review of NASS–CDS cases; see Real-World Data section.

than small-stature occupants in narrow-object side impact crashes, the rationale presented in previous rulemakings for using the 5th percentile female dummy in the front near-side seat is still compelling. The side impact standard (FMVSS No. 214), ejection mitigation standard (FMVSS No. 226), and IIHS moderate and small offset frontal impact tests should encourage vehicle designs which provide adequate side impact protection for small-stature occupants' heads. Further, the agency believes the injury mitigation techniques developed for the WorldSID–50M ATD's torso, abdomen, and pelvis should benefit smaller occupants. In using the WorldSID–50M in the enhanced consumer information program, the agency is taking a complementary approach by also relying on compliance testing and regulation.

c. Additional Considerations

Currently, NCAP's side test protocol specifies that the left (driver) side of the vehicle be struck by the moving barrier or pole. As part of this NCAP upgrade, NHTSA intends to exercise the option of having the side MDB and/or pole impact either the left side or right side of the vehicle, similar to FMVSS No. 214 protocol. Expanding the test applicability to cover both the left and right sides should ensure that the side impact rating includes information about the protection offered to the occupants on both sides of a vehicle. Only one crash test will be performed per vehicle and per crash type. The agency is specifically seeking comment on this amendment to the NCAP protocol.

In the 2013 request for comments, NHTSA received comment on using dummies in the non-struck side of the crash test. The agency is not considering the inclusion of far-side dummies at this time. Pilot-testing has not been conducted to determine which dummies would be most suitable, which test conditions need to be adjusted, and what types of injury data would be collected from such tests.

As part of this RFC notice, the agency is also requesting comment on a revised seating procedure for the rear seat SID–IIs dummy in the side MDB test. The current seating procedure has been amended to account for new rear seat designs.

4. Side Test Dummies

a. WorldSID 50th Percentile Male ATD (WorldSID–50M)

i. Background

The WorldSID–50M ATD is a state-of-the-art side impact dummy that was developed beginning in June 1997 under the auspices of the International Organization for Standardization (ISO) working group on Anthropomorphic Test Devices (TC22/SC12/WG5). It is part of the WorldSID family of dummies, which currently only includes the 50th percentile male and 5th percentile female. The working group's primary goal was to create a single, worldwide harmonized, mid-size male test device for side impact that had enhanced injury assessment capabilities, superior biofidelity and anthropometry, and which would eliminate the need to use different dummies in different parts of the world in regulation and other testing. This would also offer the benefit of reducing total development costs for manufacturers.

While the WorldSID–50M ATD has not been used previously in NHTSA rating programs, it is currently being used by other agencies and organizations worldwide. Euro NCAP began using WorldSID–50M ATD in both side barrier and side pole testing in 2015, and China-NCAP has committed to use it in 2018. Other consumer programs, such as Korean NCAP and ASEAN NCAP, are also considering its use, and it is being recommended as the test device in the pole side impact Global Technical Regulation (GTR) No. 14.[126] The inclusion of WorldSID–50M ATD into NCAP would further enhance harmonization, a goal supported by many of the respondents to the agency's April 2013 request for comments notice on NCAP enhancements. It also presents a strategy which is similar to that employed by Euro NCAP, whereby the WorldSID–50M ATD was added to Euro NCAP to serve as a consumer test tool prior to it being adopted into regulation (United Nations Economic Commission of Europe (ECE) R95).

Manufacturers also commented in their responses to the 2013 RFC that the adoption of more biofidelic dummies like the WorldSID–50M ATD will allow them to develop improved occupant protection systems and therefore reduce injury risk to the general public.[127] As will be discussed later, NHTSA has evaluated the WorldSID–50M ATD using an updated version of the NHTSA biofidelity ranking system and finds this dummy to be superior because of its improved shoulder response, improved thoracic response in both lateral and oblique directions, ability to measure abdominal displacement, and durability and repeatability.

Given the outcome of the agency's biofidelity assessment of the WorldSID–50M dummy, its injury assessment measurement capabilities, and the broad support expressed for the dummy, both through responses to the agency's 2013 Request for Comments and its use in other consumer programs, the agency plans to adopt the WorldSID–50M dummy in NCAP for use in the front struck-side seat in the side MDB test as well as the side oblique pole test.

ii. Anthropometry, Construction, and Material Properties

As mentioned previously, to ensure that a dummy can appropriately replicate the motion and responses of a human in a real-world crash, it is critical that the dummy's anthropometry (*i.e.,* size and shape) accurately reflect the population it is intended to represent. Work related to WorldSID–50M ATD's anthropometry was carefully conducted to ensure this would be the final result. An anthropometrical study conducted by UMTRI served as the basis for WorldSID–50M ATD's anthropometry.[128] The study was developed with consideration given to the dummy design process and consisted of measuring actual humans in actual vehicle seats.

According to the latest ISO documentation, the WorldSID–50M dummy stands 175 cm tall (5 ft 9 in) and weighs 74.4 kg (164.0 lb) in the suited, half-arm configuration.[129] This compares well to the average height (172 cm, or 5 ft 7 in) and weight (80.6 kg, or 177.7 lb) of front seat occupants injured in collisions with passenger vehicles and narrow objects.[130]

Similar to that mentioned for the THOR–50M dummy, the WorldSID–50M ATD's rib cage geometry is also more similar to a human's. When seated, the WorldSID–50M ATD's ribs are oriented nearly horizontally since they are angled downward like a human's when standing. Furthermore, the WorldSID–50M ATD exhibits a more anatomically correct representation of a vehicle-seated posture as its specifications were based on a study of

[126] ECE/TRANS/180/Add.14.

[127] ''New Car Assessment Program,'' Docket No. NHTSA–2012–0180.

[128] University of Michigan ''Development of Anthropometrically Based Specifications for an Advanced Adult Anthropomorphic Dummy Family'', Volume 1–2, December 1983.

[129] Note that the agency is proposing to use the half-arm configuration in crash tests; the mass of this dummy when suited with full arms is 78.3 kg (172.6 lb). All dummy weights can be found in ISO Technical Specification, ISO/TS 15830–5 (revised 9–Jul–15).

[130] NHTSA's review of NASS–CDS cases; see Real-World Data section.

humans in vehicle seats. The seated posture for the WorldSID–50M ATD's lumbar spine, which is designed for more human-like thorax-pelvis coupling, is more flexible. This causes the WorldSID–50M ATD to sit in a more slouched position.

The WorldSID–50M ATD's ribs, which are each designed to allow a lateral deflection of at least 75 mm (2.95 in), are made of a super-elastic nickel-titanium alloy that allows them to deflect similarly to a human's.[131] The WorldSID–50M ATD has two abdomen ribs that share the same construction, and therefore deflection behavior, as the dummy's thorax ribs. The latest build level of the WorldSID–50M ATD utilizes two-dimensional Infra-Red Telescoping Rods for Measuring Chest Compression (2D IR–TRACCs). The IR–TRACCs, which are used to measure shoulder, thoracic, and abdominal rib deflections in the WorldSID–50M ATD, measure the change in distance between the spine box and the most lateral point of the dummy's ribs. Previous build levels of the WorldSID–50M ATD are equipped with one-dimensional (1D) IR–TRACCs, but these are no longer supplied with the dummy.

Instead of using the 2D IR–TRACCs, a RibEye™ system for the WorldSID–50M, available from Boxboro Systems, LLC, may be used.[132] The RibEye™ system is the same general system described earlier that NHTSA intends to use in the HIII–5F. RibEye™, used to measure shoulder, thoracic, and abdominal rib deflections, optically measures the change in distance in the X, Y, and Z directions between the spine box and appropriate points on the dummy's ribs.

iii. Biofidelity

The design and evaluation of effective occupant protection systems is dependent upon the availability of dummies and degree of biofidelity—those which are able to reliably and repeatedly predict possible human injuries. Biofidelity is a measure of how well a dummy duplicates the responses and kinematics of a human vehicle occupant during a real-world crash event. As mentioned previously, one of the WorldSID task group's main goals in developing the WorldSID–50M ATD was to create a harmonized side impact dummy having superior biofidelity. There are two main biofidelity rating systems in use today—the International Organization for Standardization Technical Report 9790 (ISO/TR9790) classification system,[133] and the Biofidelity Ranking System (BRS, or BioRank) developed by NHTSA.[134] [135] [136]

The ISO/TR9790 biofidelity classification system utilizes a series of drop tests, pendulum impact tests, and sled tests to determine individual biofidelity ratings for six body regions, including the head, neck, shoulder, thorax, abdomen, and pelvis.[137] Subsequently, the dummy is assigned an overall biofidelity rating, which is calculated by weighting and summing the biofidelity ratings for the individual body regions. As shown in Table 2, the scale for overall and individual body region ratings ranges from 0 (unacceptable) to 10 (excellent), with higher numbers indicating better biofidelity.

TABLE 2—ISO BIOFIDELITY CLASSIFICATION

Excellent	> 8.6 to 10.
Good	> 6.5 to 8.6.
Fair	> 4.4 to 6.5.
Marginal	> 2.6 to 4.4.
Unacceptable	0 to 2.6.

Source: ISO/TC22/SC12/WG5, Technical Report 9790—Road Vehicle—Anthropomorphic side impact dummy—lateral impact response requirements to assess the biofidelity of the dummy, 2000.

The ISO WorldSID Task Group has used the ISO/TR9790 impact test methods and biofidelity rating scale to evaluate the WorldSID–50M ATD.[138] The overall biofidelity rating and the assessed body regions are shown in Table 3. The WorldSID–50M ATD, which received an ISO rating of 8.0, is classified as having ''good'' biofidelity. It also received overwhelmingly positive ratings for each body region. In fact, head, shoulder, and abdominal biofidelity were rated ''excellent'', and thoracic biofidelity was rated ''good.'' Neck and pelvis biofidelity were rated ''fair''. Such localized biofidelity is as equally important as overall biofidelity as this allows vehicle safety engineers to optimize vehicle designs and enhance occupant protection in side impact crashes.

TABLE 3—WORLDSID 50TH PERCENTILE MALE SIDE IMPACT DUMMY BIOFIDELITY—ISO RATINGS

	Head	Neck	Shoulder	Thorax	Abdomen	Pelvis	Overall
WorldSID	10	5.3	10	8.2	9.3	5.1	8.0

Source: Scherer, R., Bortenschlager, K., Akiyama, A., Tylko, S., Hartleib, M., and Harigae, T., ''WorldSID Production Dummy Biomechanical Responses,'' The 21st International Technical Conference for the Enhanced Safety of Vehicles, Paper No. 09–0505, 2009.

NHTSA has performed its own biofidelity evaluation of the WorldSID–50M ATD using the Biofidelity Ranking system.[139] Like the ISO/TR9790 biofidelity classification system, this system uses pendulum impact tests and sled tests to evaluate how well a dummy replicates the behavior and response of a human being across various body

[131] ISO WorldSID Task Group, ''About WorldSID,'' [*www.worldsid.org/aboutworldsid.htm*]. Accessed 25 Sep 2015.

[132] Hardware User's Manual, RibEye multi-point deflection measurement system, 3-axis version for the WorldSID 50th ATD, Boxboro Systems, LLC, February 2011.

[133] ISO/TC22/SC12/WG5, Technical Report 9790—Road Vehicle—Anthropomorphic side impact dummy—lateral impact response requirements to assess the biofidelity of the dummy, 2000.

[134] Rhule, H. H., Maltese, M. R., Donnelly, B. R., Eppinger, R. H., Brunner, J. K., & Bolte, J. H. IV. ''Development of a New Biofidelity Ranking System for Anthropomorphic Test Devices,'' Stapp Car Crash Journal 46: 477–512, 2002.

[135] Rhule, H., Moorhouse K., Donnelly, B., & Stricklin, J. ''Comparison of WorldSID and ES–2re Biofidelity Using an Updated Biofidelity Ranking System,'' The 21st International Technical Conference for the Enhanced Safety of Vehicles, Paper No. 09–0563, 2009.

[136] Rhule, H., Donnelly, B., Moorhouse, K., & Kang, Y.S. ''A Methodology for Generating Objective Targets for Quantitatively Assessing the Biofidelity of Crash Test Dummies,'' The 23rd International Technical Conference for the Enhanced Safety of Vehicles, Paper No. 13–0138.

[137] A set of requirements is established for each test specified for a particular body region. Dummy responses for a given test are subsequently compared against expected corridors for each requirement, and a rating for each requirement is then assigned. Ratings for the individual requirements are then weighted and summed to arrive at an overall rating for each test conducted for a particular body region. The test ratings for any one body region are then weighted and summed to assign an individual rating for the body region.

[138] Scherer, R., Bortenschlager, K., Akiyama, A., Tylko, S., Hartleib, M., and Harigae, T., ''WorldSID Production Dummy Biomechanical Responses,'' The 21st International Technical Conference for the Enhanced Safety of Vehicles, Paper No. 09–0505, 2009.

[139] Rhule, H., Moorhouse K., Donnelly, B., & Stricklin, J. ''Comparison of WorldSID and ES–2re Biofidelity Using an Updated Biofidelity Ranking System,'' The 21st International Technical Conference for the Enhanced Safety of Vehicles, Paper No. 09–0563, 2009.

regions. Rankings are calculated for both external and internal biofidelity. For this method, external biofidelity is a measure of how closely the dummy simulates PMHS external loadings onto the surrounding impact structures (as measured by pendulum and sled load plate force-time history responses), and internal biofidelity provides a measure of how closely the dummy's internal injury responses match those of PMHS (*e.g.* rib deflection) under similar conditions.[140] A lower ranking indicates a closer dummy response relative to that of the mean cadaver and thus better dummy biofidelity. A dummy with a biofidelity ranking of less than 2.0 responds much like a human subject. The WorldSID–50M ATD has an overall external biofidelity ranking of 2.2 and internal biofidelity of 1.2 (without the abdomen). Biofidelity rankings of the WorldSID–50M ATD's individual body regions are given in Table 4.

TABLE 4—WORLDSID–50M SIDE IMPACT DUMMY BIOFIDELITY—NHTSA BIORANKS

Body region	External biofidelity	Internal biofidelity
Head	.....	0.3
Neck	.....	0.8
Shoulder	1.0	0.9
Thorax	3.2	2.0
Abdomen	1.9	2.4
Pelvis	2.7	1.8
Overall (with Abdomen)	2.2	1.4
Overall (without Abdomen)	—	1.2

Source: Rhule, H., Moorhouse K., Donnelly, B., & Stricklin, J. ''Comparison of WorldSID and ES–2re Biofidelity Using an Updated Biofidelity Ranking System,'' The 21st International Technical Conference for the Enhanced Safety of Vehicles, Paper No. 09–0563, 2009.

In addition to the biofidelity ratings assessed by the ISO WorldSID Task Group and NHTSA, other evaluations have been conducted assessing WorldSID–50M ATD's biofidelity, particularly with the intent to evaluate rib deflection. One study, conducted under NHTSA contract at the Medical College of Wisconsin (MCW), found that the WorldSID–50M ATD was suitable for use in both pure lateral and oblique loading scenarios.[141] However, it was noted that the 2D IR–TRACCs still underreported deflection in oblique impacts; this was not the case for lateral impacts. The report also indicated that the lateral-most point of the rib may not be the most adequate location for measuring thoracic and abdominal deflections in oblique loading and that evaluation of other deflection measurement systems may be warranted.

NHTSA then performed quasi-static testing to better understand how much the IR–TRACCs can underestimate deflection from oblique loading. A single WorldSID–50M rib was slowly compressed with a materials testing machine at 0 degrees (lateral), 20 degrees anterior-to-lateral, and 50 degrees anterior-to-lateral while photographs and videos were taken to document the IR–TRACC's motion. When loaded laterally, the IR–TRACC rotated somewhat, but as the point of load application became further from the point of IR–TRACC attachment, the IR–TRACC rotated to a greater degree, away from the application of loading. Even when the y-direction deflection was calculated using the rotation of the IR–TRACC and the compression of the telescoping IR–TRACC rod, in the extreme case of the 50-degree severely-oblique load, the IR–TRACC did not capture the full, maximum deflection of the rib. A similar response occurs in the SID–IIs ATD's shoulder, thoracic and abdominal ribs, which include linear potentiometers mounted at the lateral-most point of the rib, which will not capture maximum deflection if the point of loading is far from the potentiometer mount location.

Although these concerns have been raised, NHTSA is aware of research that shows that oblique crashes do not necessarily result in oblique loading to the dummy's chest. Though seemingly counterintuitive, Transport Canada and the Australian Government Department of Infrastructure and Transport has found that in oblique vehicle-to-pole crash conditions, such as those used in FMVSS No. 214, the WorldSID–50M ATD actually experiences predominantly lateral peak rib deflection responses.[142]

Nonetheless, the use of an improved deflection measurement system may be valuable to pursue.[143] Thus, NHTSA intends to conduct further research to evaluate the use of RibEye™ optical sensors in the WorldSID–50M ATD's thorax and abdomen as an alternative to the 2D IR–TRACCs already provided. The RibEye™ system can measure the deflection of the inner ribs in the X, Y, and Z directions at three locations on each rib. This may serve to better monitor oblique deformation of the ribs.

iv. Repeatability and Reproducibility

The WorldSID–50M ATD's body regions demonstrated good repeatability and reproducibility when production versions of the dummy were subjected to certification tests performed per ISO 15830–2.[144] Repeatability is assessed by performing repeat tests on the same dummy, and reproducibility is determined by performing repeat tests on different dummies. Generally, a minimum of three trials were conducted per test. Repeatability was assessed based on the percent coefficient of variation (CV), which is defined as the standard deviation of the samples divided by the sample mean, expressed as a percentage. Responses having a CV

[140] Rankings for either internal or external biofidelity are based on the ratio of the cumulative variance of the dummy response relative to the mean cadaver response and the cumulative variance of the mean cadaver response relative to the mean plus one standard deviation. This ratio (*e.g.,* ranking) expresses how well a dummy duplicates a cadaver response.

[141] Yoganandan, N., Humm, J.R., Pintar, F.A., & Brasel, K., ''Region-specific deflection responses of WorldSID and ES2-re devices in pure lateral and oblique side impacts,'' Stapp Car Crash Journal, 55: pp. 351–378, 2011.

[142] Belcher, T., Terrell, M. & Tylko, S., ''An Assessment of WorldSID 50th Percentile Male Injury Responses to Oblique and Perpendicular Pole Side Impacts,'' The 22nd International Technical Conference for the Enhanced Safety of Vehicles, Paper No. 11–0133, 2011.

[143] NHTSA research tests conducted with WorldSID dummies outfitted with chest bands showed cases of oblique loading for both front and rear seating locations in testing carried out using the Side NCAP MDB protocol.

[144] Scherer, R., Bortenschlager, K., Akiyama, A., Tylko, S., Hartleib, M., & Harigae, T., ''WorldSID Production Dummy Biomechanical Responses,'' The 21st International Technical Conference for the Enhanced Safety of Vehicles Conference, Paper No. 09–0505, 2009.

of less than 5 percent are generally considered as having an excellent level of repeatability, those with a CV of 5–8 percent are considered good, those with a CV of 8–10 percent are considered acceptable, and those having a CV of more than 10 percent are generally considered as having an unacceptable or poor level of repeatability. The resulting CV for the dummy's various body parts was below 5 percent in many cases and below 10 percent in all measured cases, with the exception of lower spine T12 lateral acceleration when the dummy's thorax was assessed without the arm.[145] Values were generally in line with expectations—a CV for injury assessment of less than or equal to 7 percent.

v. Seating Procedure

Although the impact protocols for the side MDB and pole tests will remain largely unchanged, slight modifications to the test procedures will have to be made to accommodate the new test dummy. It will be necessary to adjust the test weight calculation to accommodate the weight of the WorldSID–50M ATD as opposed to the current ES–2re or SID–IIs ATDs. The agency will need to make other minor changes with respect to data collection and reporting. Because of the WorldSID–50M ATD's anthropometrical differences compared to the ES–2re and SID–IIs ATDs, alterations to the seating procedure must also be made.

Several seating procedures for the WorldSID–50M ATD have been developed: The WorldSID working group version 5.4 (WSG 5.4) and the ISO/TS22/SC10/WG1's version (ISO/DIS 17949:2012, or GTR version). ISO/TS22/SC10/WG1 is a group established to develop car collision test procedures. The NHTSA WorldSID–50M ATD draft seating procedure (NWS50) that the agency has developed, found in the docket for this RFC notice, is based on the existing FMVSS No. 214 procedure for the ES–2re and the WSG 5.4 seating procedures.[146] In the NWS50 procedure, the seat position is 20 mm (0.79 in) rearward of mid-track position, as is prescribed in WSG 5.4. Since the WorldSID–50M ATD's legs are longer than those of the ES–2re ATD, the adjusted seat track position at 20 mm (0.79 in) rearward of mid-track allows the legs to be placed in a more natural position. The final target for the H-point is modified to account for the rearward change in seat placement along the seat track by adding 20 mm (0.79 in) to the target H-point.[147]

The NWS50 procedure determines the mid angle of the seat pan at the beginning of seat positioning and keeps the seat pan at the lowest position while maintaining the mid-angle of the seat pan. This is in contrast to WSG 5.4 and GTR versions, which allow the seat pan angle to change if the seat pan can move to a lower position. The GTR, WSG 5.4, and NWS50 procedures are generally the same with respect to dummy positioning, with the exception of differences in tolerance values for leveling the head and the thorax and pelvis tilt sensors.[148] [149] [150]

vi. Fleet Testing

The agency has some experience with the WorldSID–50M ATD in a research capacity. NHTSA has evaluated the WorldSID–50M dummy in FMVSS No. 214 crash test protocols. After the 2007 Final Rule was released, an initial series of side MDB and pole tests was successfully conducted on the MY 2005 fleet. The evaluation examined the overall performance of the WorldSID–50M ATD. The anthropometry and testing results were discussed in a 2009 International Technical Conference for the Enhanced Safety of Vehicles paper and at the 2008 and 2009 SAE Government Industry Meetings.[151] [152] [153] A second fleet evaluation consisting of MDB and pole tests was conducted with MY 2010–2012 vehicles, in part to evaluate the seating procedure. This testing proved the feasibility of the NWS50 procedure. More detailed results of this testing were presented at the 2014 SAE Government Industry Meeting,[154] and the NHTSA database test numbers associated with this evaluation can be found in Appendix V.

vii. Durability

The WorldSID–50M ATD was designed with durability specifications in mind. ISO/TC22/SC12/WG5's requirements were that the dummy must remain functional for at least ten tests in which the dummy was subjected to loads up to 150 percent of IARVs established at the time.[155] In the dummy's development phase, the WorldSID–50M ATD's shoulder rib was found to permanently deform and IR–TRACC damage occurred as a result of excessive stroking (*e.g.,* bottoming out) during the 8.9 m/s rigid wall sled test and the 2 m full-body drop test. Although these tests are considered quite severe, a rib doubler was added to the outer shoulder rib to strengthen it.[156] This change resulted in improved durability, as further testing undertaken by the ISO/TC22/SC12/WG5 showed no permanent deformation of the shoulder rib or IR–TRACC damage.[157] Furthermore, during full-scale side pole and barrier tests conducted with the WorldSID–50M ATD in the driver and/or rear passenger struck side position, no damage was observed for the head, neck, thorax, pelvis, or legs during visual inspections even though some injury readings were recorded as being up to three times the IARVs or had achieved the maximum measurement range.[158]

NHTSA's testing confirmed the ISO's durability findings. NHTSA's first round of side pole and MDB fleet testing with the WorldSID–50M ATD resulted in only minor damage to the dummies used during the test series. In one test, the dummy's shoulder IR–TRACC was observed to be damaged at both ends post-test. It was also discovered that the WorldSID–50M ATD's rib damping material de-bonded from the metal ribs over the course of the test series. This finding led to a change in the rib damping material.[159] It is worth noting

[145] For this test, the CV was 10.7%.

[146] WSG 5.4 Seating Procedure, placed in the docket of this RFC notice.

[147] Louden, A., ''WorldSID 50th Male Seating Evaluation and Fleet Testing,'' Society of Automotive Engineers Government/Industry Meeting, January 2012.

[148] NHTSA WS50th Seating Procedure, placed in the docket of this RFC notice.

[149] WSG 5.4 Seating Procedure, placed in the docket of this RFC notice.

[150] ECE/TRANS/180/Add.14.

[151] Louden, A., ''Dynamic Side Impact Testing with the 50th Percentile Male WorldSID Compared to the ES–2re,'' The 21st International Technical Conference for the Enhanced Safety of Vehicles, Paper No. 09–0296, 2009; ''Status of WorldSID 50th Percentile Male Side Impact Dummy,'' European Enhanced Vehicle-Safety Committee Working Group, 12 March 2009.

[152] Louden, A., ''Side Impact Crash Testing with the 50th Percentile Male WorldSID,'' Society of Automotive Engineers Government/Industry Meeting, May 2008

[153] Louden, A., ''50th Male WorldSID Test Results in FMVSS 214 Test Conditions & ES–2re Comparisons,'' Society of Automotive Engineers Government/Industry Meeting, February 2009.

[154] Louden, A. and Weston, D., ''WorldSID Status: 50th Male and 5th Female,'' Society of Automotive Engineers, Government/Industry Meeting, January 2014.

[155] ISO WorldSID Task Group, ''Durability Requirements and Performance,'' [*www.worldsid.org/Documentation/TG%20N394%20WorldSID%20Durability%20Requirements%20and%20Performance%2020050331.pdf*]. Accessed 25 Sep 2015.

[156] ISO WorldSID Task Group, ''Durability Requirements and Performance,'' [*www.worldsid.org/Documentation/TG%20N394%20WorldSID%20Durability%20Requirements%20and%20Performance%2020050331.pdf*]. Accessed 25 Sep 2015.

[157] Ibid.

[158] Ibid.

[159] Louden, A., ''Dynamic Side Impact Testing with the 50th Percentile Male WorldSID Compared to the ES–2re,'' The 21st International Technical Conference for the Enhanced Safety of Vehicles,

Continued

that the damage to the shoulder IR–TRACCs only occurred during oblique pole tests, and the vehicles tested were not certified to the oblique pole side impact standards implemented in 2007.

During the agency's second round of fleet testing, part of the dummy's shoulder IR–TRACC was damaged in 2 of the 12 vehicles tested during pole testing, but this was the only notable damage.[160] None of the dummy's shoulder IR–TRACCs were damaged during side MDB testing.[161] Future vehicles should show not only reduced intrusion because of improvements made to strengthen vehicles' side structure, but they should also have greater side air bag coverage to accommodate the range of occupants subjected to FMVSS No. 214 testing, which should serve to distribute the loads imparted to the test dummies. Side air bags in general, particularly chest and pelvis air bags, are now seen more often in larger vehicles.[162] With the incorporation of such changes, it is expected that a reduction in shoulder deflection would be seen in future testing with FMVSS No. 214-compliant vehicles.

viii. Instrumentation

Instrumentation for the WorldSID–50M ATD was designed to be easy to use and to comply with recognized instrumentation standards such as SAE J211—Instrumentation for Impact Test and ISO 6487—Measurement Techniques in Impact Tests—Instrumentation. The dummy's instrumentation supports the assessment of injury risk for practically all known side impact injury criteria used in existing side impact protocols worldwide and also supports the evaluation and optimization of vehicle components and restraint systems.[163]

The WorldSID–50M ATD can be instrumented with upper and lower neck load cells; 2D IR–TRACCs or RibEye™ in the shoulder rib, three thoracic ribs, and two abdomen ribs to measure displacement; a shoulder load cell; a pubic load cell; iliac and sacrum load cell; and accelerometers at numerous locations, including the head, upper and lower spine, ribs, and pelvis, to measure the ''g'' levels that are applied to the dummy during a side impact crash. Accelerometers placed at the head center of gravity measure linear and rotational accelerations, while angular rate sensors measure angular velocity of the head. With respect to the dummy's upper limbs, two arm configurations are available—half arms, which are standard, and full arms, which are optional. The dummy's upper and lower legs include load cells and rotational potentiometers, in addition to other sensors.

The WorldSID–50M ATD was also designed to have an optional in-dummy data acquisition system (DAS), which is wholly contained within the dummy and includes integrated wiring. This DAS, which has the ability to collect up to 224 data channels, eliminates the need for a single, large umbilical cable.[164] Current dummies require the use of an umbilical cable that runs from the dummy's spine to a DAS located elsewhere—either on or off the vehicle. These cables can add weight to the test vehicle. With the large amount of data channels possible for the WorldSID–50M ATD, an umbilical cable is not practical.

ix. Injury Criteria and Risk Curves

The construction of injury risk curves for the WorldSID–50M ATD was initiated in 2004 by the ISO Technical Committee 22, Sub-committee 12, Working Group 6 (ISO/TC22/SC12/WG6). Additional support for this project came from the Dummy Task Force of the Association des Constructeurs Europeens d'Automobiles (ACEA–TFD) in 2008. The ACEA–TFD aimed to promote consensus among biomechanical experts as to the injury risk curves that should be used. Subsequently, a group of biomechanical experts worked to develop injury risk curves for the WorldSID–50M ATD shoulder, thorax, abdomen, and pelvis.[165] These curves, which were released and discussed at the May 2009 meeting of ISO/TC22/SC12/WG6, were developed using the following process: (1) An extensive review of all available PMHS side impact test datasets (impactor tests and sled tests) worldwide was conducted, and those test configurations that could be reproduced using the WorldSID–50M ATD were selected, (2) WorldSID–50M ATD responses from similar test configurations were obtained and scaled to simulate the same test severities the PMHS were exposed to by accounting for anthropometry differences between the PMHS and 50th percentile dummy, and (3) the scaled WorldSID–50M ATD data was paired with PMHS injuries for each body region and test condition to construct injury risk curves based on commonly used statistical methods. Although injury risk curves are historically constructed for AIS 3+ injuries, a well-distributed sample of injured and non-injured PMHS at this AIS level was not available for some body regions. In such instances, risk curves were developed for other AIS levels for which injury results were better balanced.[166] In most cases, the AIS levels evaluated were reduced. This should have the effect of addressing a larger amount of injuries in the real world.

When injury risk curves for the WorldSID–50M ATD were proposed by Petitjean et al. in 2009, there was no consensus on what injury criteria should be adopted or which statistical method—certainty, Mertz-Weber, consistent threshold estimate (CTE), logistic regression, or survival analysis with Weibull distribution—should be used to construct the injury risk curves from the test data. Ultimately, however, in 2011, after using statistical simulations to compare the performance of the different statistical methods, Petitjean et al. recommended that the Weibull survival method be used over the other statistical methods to construct injury risk curves for the WorldSID–50M ATD.[167] Around the same time, ISO/TC22/SC12/WG6 reached consensus on a set of guidelines that was to be used to not only build injury risk curves, but also to recommend the risk curve that is considered to be the most relevant to the sample studied. In 2012, Petitjean et al. applied these guidelines to the WorldSID–50M ATD results published in 2009 in order to provide a final set of injury risk curves for the WorldSID–50M ATD. These curves, which were specified for lateral shoulder force, thoracic rib deflection, abdomen rib deflection, and pubic force, were

Paper No. 09–0296, 2009; ''Status of WorldSID 50th Percentile Male Side Impact Dummy,'' European Enhanced Vehicle-Safety Committee Working Group, 12 March 2009.

[160] Louden, A., ''WorldSID 50th Male Seating Evaluation and Fleet Testing,'' Society of Automotive Engineers Government/Industry Meeting, January 2012.

[161] Louden, A. & Weston, D., ''WorldSID Status: 50th Male and 5th Female,'' Society of Automotive Engineers, Government/Industry Meeting, January 2014.

[162] Park, B., Rockwell, T., Collins, L., Smith, C., & Aram, M., ''The Enhanced U.S. NCAP: Five Years Later,'' The 24th International Technical Conference for the Enhanced Safety of Vehicles, Paper No. 15–0314, 2015.

[163] ISO WorldSID Task Group, ''Instrumentation,'' [*www.worldsid.org/Documentation/TG%20N397%20Instrumentation%2020050401.pdf*]. Accessed 28 Aug 2015.

[164] ISO WorldSID Task Group, ''Background,'' [*www.worldsid.org/Documentation/Background%2020051116.pdf*]. Accessed 25 Sep 2015.

[165] Petitjean, A., Trosseille, X., Petit, P., Irwin, A., Hassan, J., & Praxl, N., ''Injury Risk Curves for the WorldSID 50th Percentile Male Dummy,'' Stapp Car Crash Journal, 53: 443–476, 2009.

[166] Ibid.

[167] NHTSA has historically used logistic regression to develop injury risk curves.

ultimately recommended by ISO/TC22/SC12/WG6.

The recommended risk curves for the WorldSID–50M ATD, as published by Petitjean et al. in 2012, were adjusted for both 45-year-olds and 67-year-olds.[168] The agency will decide on an appropriate age at which to scale risk curves for the WorldSID–50M ATD once final, adjusted population estimate data has been calculated and examined. The injury criteria and associated risk curves NCAP intends to use for the WorldSID–50M ATD are described below and detailed in Appendix IV of this document. The agency intends to adopt injury criteria to address head, shoulder, thorax, abdominal, and pelvis risk. Injury criteria for most of these body regions (head, thorax, abdomen, and pelvis) are currently included for the ES–2re dummy in FMVSS No. 214 and side NCAP. The injury criteria mentioned below are generally consistent with those recommended by ISO/TC22/SC12/WG6 and those currently under evaluation by the Working Party on Passive Safety (GRSP) for inclusion in the pole side impact GTR. With few exceptions, they are also used currently by Euro NCAP for rating vehicles.

The agency is seeking comment on the risk curves included herein, as well as all aspects of the following:

HEAD—NHTSA's preliminary analysis of real-world vehicle-to-vehicle and vehicle-to-pole side impact crashes showed that approximately one third (34%) of all AIS 3+ injuries for front seat, medium-stature occupants were to the head. The data reviewed showed that, of the AIS 3+ head injuries reported, 91 percent were brain injuries in vehicle-to-vehicle crashes, and 82 percent were brain injuries in vehicle-to-pole crashes.[169] As mentioned previously, HIC (either 15 milliseconds (ms) or 36 ms in duration) is a measure of only translational head acceleration; it does not account for rotational motion of the head, which has been commonly seen in side impact crashes and which may induce brain injury. To account for this rotational motion, the agency is planning to adopt the brain injury criterion, BrIC, for the WorldSID–50M dummy. The WorldSID–50M ATD can be equipped to measure rotational accelerations and/or rotational velocities at the head center of gravity. If accelerations are used, they must be integrated to obtain the rotational velocity used to calculate BrIC; however, if rotational velocity is measured directly, no further processing is necessary. Therefore, the agency intends to use angular rate sensors to calculate BrIC. The AIS 3+ risk curve associated with BrIC for the WorldSID–50M is included in Appendix IV.

As BrIC is intended to complement HIC rather than replace it, the agency will continue to measure HIC_{36} readings in side NCAP MDB and pole tests with the WorldSID–50M dummy. The AIS3+ risk curve associated with HIC_{36} is found in Appendix IV.

SHOULDER—The agency also intends to evaluate injuries stemming from the crash forces imparted to the WorldSID–50M ATD's shoulder. The agency's analysis of real-world vehicle-to-vehicle and vehicle-to-pole crashes showed that 13 percent of all AIS 2+ injuries reported for medium-stature occupants in the front seat were shoulder injuries.[170] The WorldSID–50M ATD's shoulder shows excellent biofidelity; recall that the ISO rating for the WorldSID–50M ATD's shoulder is 10, and its NHTSA external and internal BioRank scores are 1.0 and 0.9, respectively. Shoulder design can substantially affect dummy response during side pole and side air bag interactions, and biofidelity is extremely important in narrow object crashes where the margins between minor and serious or fatal injury are relatively small.[171]

NHTSA has chosen to evaluate shoulder injury risk for the WorldSID–50M ATD as a function of maximum shoulder force in the lateral direction (Y). The associated AIS 2+ risk curve, developed by Petitjean et al. (2012), can be found in Appendix IV.

The agency has some concern that assessing shoulder injury risk in NCAP may prohibit manufacturers from offering the best thorax protection, as it may be necessary for vehicle manufacturers to direct loading in severe side impact crashes towards body regions that are best able to withstand impact, such as the shoulder, in order to divert loads away from more vulnerable body regions, such as the thorax. In fact, it is for these reasons that the side pole GTR informal working group decided not to establish a threshold for shoulder force based on the AIS 2+ injury risk curves developed by ISO/TC22/SC12/WG6.[172] That said, the informal working group thought it was still important to prevent non-biofidelic (*e.g.,* excessive) shoulder loading so that vehicle manufacturers could not use such excessive shoulder loading to reduce thorax loading artificially. Accordingly, the informal working group agreed upon a maximum peak lateral shoulder force of 3.0 kN (674.4 lb-force). The agency's fleet testing showed maximum shoulder forces ranging from 1.2 kN (269.8 lb-force) to 2.6 kN (584.5 lb-force) for oblique pole tests and 876 N (196.9 lb-force) to 2.3 kN (517.0 lb-force) in the side impact MDB tests. The agency is requesting comments on the merits of using a performance criterion limit (*e.g.,* IARV) instead of the AIS 2+ risk curve for shoulder force in NCAP ratings.

Petitjean et al. did not recommend an injury risk curve for shoulder deflection for the WorldSID–50M ATD because, during development of the risk curves, shoulder deflection data was only available for impactor tests, whereas shoulder force data was available for both impactor and sled tests. Since a wider range of test configurations could be used to build an injury risk curve for shoulder force compared to shoulder deflection, only a curve for maximum shoulder force was recommended.[173] The decision to recommend one injury risk per body region, injury type, and injury severity was in keeping with the guidelines agreed to by the ISO/TC22/SC12/WG6 experts.

The agency notes that it does not subscribe to these guidelines universally. For example, the Hybrid III ATD chest deflection and acceleration are both used as separate indicators of injury in FMVSSs. That said, the agency is requesting comments on the merits of also adopting a risk curve for AIS 2+ shoulder injury that is a function of shoulder deflection, as this risk curve has also been developed by ISO/TC22/SC12/WG6.[174]

CHEST—The NASS–CDS data examined showed that, in addition to the head, the chest is one of the most common seriously injured body regions in side crashes. Thirty-four percent of all AIS 3+ injuries to front seat, medium-stature occupants involved in vehicle-to-vehicle and vehicle-to-pole crashes were thoracic injuries.[175] As such, NHTSA intends to incorporate chest deflection injury criteria to measure thoracic injury for the WorldSID–50M ATD.

Petitjean et al., 2012 developed an injury risk function to relate maximum thoracic and abdominal rib deflection of the WorldSID–50M ATD, as measured

[168] Petitjean, 2012.

[169] NHTSA's review of NASS–CDS cases; see Real-World Data section.

[170] Ibid.

[171] ECE/TRANS/180/Add.14.

[172] Ibid.

[173] Petitjean, A., Trosseille, X., Praxl, N., Hynd, D., Irwin, A., ''Injury Risk Curves for the WorldSID 50th Male Dummy,'' Stapp Car Crash Journal, 56: 323–347, 2012.

[174] ISO/TR 12350:2002(E).

[175] NHTSA's review of NASS–CDS cases; see Real-World Data section.

by a 1D IR–TRACC, to AIS 3+ thoracic skeletal (and abdominal skeletal) injury obtained from PMHS. This risk curve, presented in Appendix IV, is a function of both thoracic and abdominal rib deflection because the abdominal ribs of the WorldSID–50M dummy partially overlap the thorax ribs of a mid-size adult male.[176] Because of this, increased loading of the WorldSID–50M ATD's abdominal ribs would be expected to increase the risk of both AIS 3+ thorax and AIS 3+ abdominal injuries. Although chest deflection has been shown to be the best predictor of thoracic injuries in side impact crashes, the agency has some concerns, as mentioned previously, regarding the WorldSID–50M ATD's ability to accurately measure deflections under oblique loading conditions. It should be noted that Petitjean et al. concluded that, for impact directions from lateral to 15° forward of lateral, the injury risk curves that would be constructed for thoracic deflection using the Y-component of the deflection measured by a 2D IR–TRACC would be close to those developed for deflection measured by a 1D IR–TRACC.[177] The authors also concluded that, for air bag tests, the deflection measured by the 1D IR–TRACC can be used as criteria for an impact direction between pure lateral and 30° forward of lateral. However, Hynd et al., 2004 concluded that for rearward oblique loading, a 1D IR–TRACC would underestimate rib deflection, and therefore, a 2D IR–TRACC or RibEye™ may more accurately reflect actual deflection under such loading conditions.[178] Research with the WorldSID–50M ATD using the optical sensing system, RibEye™, is ongoing.

Other thoracic injury criteria adopted by ISO/TC22/SC12/WG6 are maximum thoracic rib and abdomen rib viscous criteria, or VC, which are designed to address both soft tissue and skeletal injuries. The agency has not found VC to be repeatable and reproducible in the agency's research; [179] however, the agency realizes that many other organizations, including regulatory authorities, have been using VC for the EuroSID 1 and the ES–2 dummies in side impact MDB testing, including ECE Regulation No. 95, for many years. As ISO/TC22/SC12/WG6 has not yet been able to construct an AIS 3+ thoracic VC injury risk curve with an acceptable quality index for the WorldSID–50M percentile male dummy, the agency will not incorporate a peak thoracic VC into side NCAP for the next upgrade.

ABDOMEN—A smaller, yet still notable, portion of real-world injuries in side impact crashes are abdominal injuries. The agency's review of the NASS–CDS database showed that 15% of all AIS 2+ injuries for front seat, medium-stature occupants in vehicle-to-vehicle and vehicle-to-pole side impact crashes were abdominal injuries.[180] The biofidelity rating for the WorldSID–50M ATD's abdomen is greatly improved; the ISO rating for the WorldSID–50M's abdomen is a 9.3 and external and internal BioRank scores are 1.9 and 2.4, respectively. Accordingly, as part of the upgrade to NCAP, the agency intends to include abdominal rib deflection injury criterion for the WorldSID–50M ATD.

Whereas the thoracic rib deflection criterion discussed in the previous section is designed to assess both thoracic and abdominal skeletal injuries, the maximum abdomen rib deflection injury criterion is designed to gauge abdominal soft tissue injuries. Risk curves showing AIS 2+ abdomen soft tissue injury for the WorldSID–50M ATD as a function of maximum abdomen rib deflection measured by a 1D IR–TRACC can be found in Appendix IV.

This abdominal rib deflection injury criterion, which was developed and recommended by Petitjean et al. and adopted by ISO/TC22/SC12/WG6, was selected over the maximum abdomen rib VC to assess the risk of AIS 2+ abdominal soft tissue injuries because the quality index associated with the abdomen rib deflection was better than the abdomen rib VC.[181] In keeping with the ISO/TC22/SC12/WG6 guidelines to recommend one injury risk per body region, injury type, and injury severity, and in light of the agency's past experience with VC, mentioned above, the agency will not adopt an abdominal injury criterion based on maximum abdominal VC.

The agency is requesting comment on whether it is appropriate to also adopt a resultant lower spine injury criterion in hopes of capturing severe lower thorax and abdomen loading that is undetected by unidirectional deflection measurements, such as excessive loadings behind the dummy, which may cause excessive forward rotations of the ribs.[182] Resultant spinal accelerations have been shown to provide a good measure of the overall load on the thorax and, because they are being derived from tri-axial accelerometers (x, y, and z direction), are less sensitive to the direction of impact.[183] Adopting an additional criterion for lower spine acceleration would be in line with what the informal working group has decided for the side pole GTR. The informal working group agreed that the lower spine acceleration should not exceed 75 g, except for intervals whose cumulative duration is not more than 3 ms.

PELVIS—The agency's preliminary review of real-world data showed that pelvis injuries represent 13% of all AIS 2+ injuries for front seat, mid-size occupants involved in vehicle-to-vehicle crashes, and 20% of all AIS 2+ injuries for these occupants in fixed narrow object side impact crashes.[184] To evaluate pelvis injuries in side NCAP testing using the WorldSID–50M ATD, the agency intends to adopt pubic force as an additional injury criterion.

As mentioned earlier, the WorldSID–50M ATD is capable of measuring lateral pelvis acceleration and posterior sacro-iliac loads in addition to anterior pubic symphysis loads. At this time, however, the agency will only incorporate pubic symphysis injury criteria for the pelvis. The agency believes that adding a criterion to evaluate pubic symphysis loads instead of lateral pelvis acceleration is appropriate because most of the pelvis injuries observed in the PMHS samples reviewed by Petitjean et al. were ilioischial rami and pubic symphysis injuries.[185] Furthermore, pubic force is generally considered to be a more acceptable biomechanical measure than lateral pelvis acceleration.[186] The agency will also not adopt a criterion for sacro-iliac loads because a risk curve for the sacro-iliac has not yet been

[176] As indicated in Petitjean 2009, the maximum of the three thorax rib and two abdomen rib deflections was used to develop the thorax injury risk curves. This was done to be consistent with AIS 2005, which specifies that all rib fractures are used to code thoracic skeletal injuries.

[177] Petitjean, A., Trosseille, X., Praxl, N., Hynd, D., & Irwin, A., ''Injury Risk Curves for the WorldSID 50th Male Dummy,'' Stapp Car Crash Journal, 56: 323–347, 2012.

[178] Hynd, D., Carroll, J., Been, B., & Payne, A., ''Evaluation of the Shoulder, Thorax, and Abdomen of the WorldSID Pre-Production Side Impact Dummy,'' Research Laboratory Published Project Report. 2004. PPR 029.

[179] See 69 FR 28002. Docket No. NHTSA–2004–17694. Available at *https://federalregister.gov/a/04-10931*.

[180] NHTSA's review of NASS–CDS cases; see Real-World Data section.

[181] Petitjean, A., Trosseille, X., Praxl, N., Hynd, D., Irwin, A., ''Injury Risk Curves for the WorldSID 50th Male Dummy,'' Stapp Car Crash Journal, 56: 323–347, 2012.

[182] ECE/TRANS/180/Add.14.

[183] Kuppa, S. ''Injury Criteria for Side Impact Dummies,'' National Highway Traffic Safety Administration, January 2006.

[184] NHTSA's review of NASS–CDS cases; see Real-World Data section.

[185] Petitjean, A., Trosseille, X., Praxl, N., Hynd, D., & Irwin, A., ''Injury Risk Curves for the WorldSID 50th Male Dummy,'' Stapp Car Crash Journal, 56: 323–347, 2012.

[186] Ibid.

developed for the WorldSID–50M ATD. However, because the agency is aware that field evidence suggests that posterior pelvic injury may not be detected by the pubic symphysis load cell, the agency is requesting comment on how the pubic symphysis and sacro-iliac loads interrelate, and whether it is possible and necessary to establish injury criteria for both pelvic regions.

Human tolerance to pelvic loading has been established and related to the WorldSID–50M ATD, resulting in an injury risk curve, included in Appendix IV, to relate the measured maximum pubic symphysis force to the risk of an AIS 2+ pelvis injury. As risk of pelvic injury is currently assessed in side NCAP and FMVSS No. 214 at the AIS 3+ level, the agency is requesting comments on the merits of adopting the AIS 3+ risk curve for pubic symphysis force that was also recommended by Petitjean et al. instead.

b. SID–IIs ATD

i. Background

The SID–IIs dummy was developed by the Occupant Safety Research Partnership (OSRP), a research group under the umbrella of the U.S. Council for Automotive Research (USCAR), in 1993. At the time, there was a need for an ATD that would better evaluate a smaller occupant's biomechanical response to side impact countermeasures such as air bags. The SID–IIs dummy represents not only a 5th percentile female but all smaller occupants in general, including a preteen child. In the 2007 FMVSS No. 214 Final Rule, it was estimated that 34 percent of all serious and fatal injuries to near-side occupants in side impact crashes occurred to occupants 163 cm (5 ft 4 in) or less—occupants best represented by the SID–IIs ATD.[187] In narrow object side impacts in particular, drivers of smaller-stature comprised approximately 28 percent of seriously or fatally injured occupants. Of these smaller occupants, head, abdominal, and pelvic injuries represented a higher proportion of serious injury than larger occupants. By including a smaller-stature occupant in side impact crash regulations in 2007, the agency aimed to require comprehensive side impact occupant protection strategies for drivers of various sizes. Other organizations, such as the IIHS, also use the SID–IIs ATD in side crash tests.

Preliminary data from NHTSA shows that a similar percentage of small-stature occupants are being injured in side impact crashes.[188] Thus, the agency believes it is appropriate to continue assessing risk of injury for this occupant size. Some of the SID–IIs ATD's risk curves will remain unchanged; these include HIC_{36} and combined pelvic force. Additional injury assessments to be included in the side impact rating are: BrIC, thoracic and abdominal rib deflection, and lower spine resultant acceleration criteria.

ii. Continuation of Current Injury Criteria

Currently, the SID–IIs dummy is placed in both the driver's seat of the side oblique pole NCAP test as well as the rear passenger seat of the side MDB NCAP test. Head acceleration and combined pelvic force are measured and risk curves are applied to estimate the probability of injury to each body region for rating purposes. The agency has not received any indication that these criteria should be amended or omitted from future iterations of NCAP; therefore, the agency intends to continue applying the risk curves to the dummy's head and pelvis.[189]

iii. New Injury Criteria Being Implemented

Thoracic and abdominal rib deflections for the SID–IIs ATD are currently collected, but they are only being monitored at this time. This RFC notice announces the agency's intent to add thoracic and abdominal injury criterion to the next version of its consumer information program for the SID–IIs ATD. It also announces the agency's intent to incorporate lower spine resultant acceleration performance limits and BrIC for the SID–IIs ATD into the side NCAP ratings in an integrated manner.

BrIC—According to NHTSA's analysis, for small-stature occupants seated in the outboard rear row in a side-impact crash, just 6 percent of AIS 3+ injuries were head injuries. However, of those head injuries, all were to the brain.[190] Although this is a relatively small proportion of injury and other body regions are injured more frequently at this severity, traumatic brain injury can have very serious consequences. Furthermore, the SID–IIs dummies can be instrumented with rotational sensors. As with other dummies, HIC_{36} only accounts for translational head acceleration. As such, the agency intends to adopt BrIC in addition to HIC_{36} for the SID–IIs ATD in NCAP. The AIS 3+ risk curve associated with BrIC for the SID–IIs 5th percentile dummy is included in Appendix IV.

Thoracic and Abdominal Rib Deflections—The agency did not propose or adopt limits or risk curves for the SID–IIs ATD ribs in the 2007 FMVSS No. 214 upgrade. NHTSA was interested in solely monitoring rib deflections and was not prepared to limit rib deflections in FMVSS No. 214 at that time, though it did acknowledge that limits were possible for the future.[191] Since the SID–IIs Build D ATD's inclusion into the agency's consumer crash testing program in MY 2011, NHTSA has monitored the rib deflections gathered in side MDB and side pole crash testing.

Commenters to the agency's 2013 RFC asserted that deflection is a better predictor of torso injury than acceleration.[192] In terms of real-world data, chest injuries make up 26 percent of AIS 3+ injuries to small-stature, rear seat occupants in vehicle-to-vehicle crashes, and abdominal injuries account for 22 percent of AIS 3+ injuries.[193] Thus, the agency feels that it is appropriate to incorporate thoracic and abdominal injuries for small occupants into this NCAP upgrade.

Research from the OSRP noted that the SID–IIs dummy's linear potentiometers may not capture the full extent of chest deflection in oblique loading conditions.[194] However, given the safety need, NHTSA believes that inclusion of thoracic and abdominal injury evaluations in NCAP should not be further delayed. The use of the SID–IIs ATD linear potentiometers will not over predict injury risk.

The AIS 3+ and AIS 4+ risk curves for SID–IIs ATD thoracic and abdominal deflection, respectively, can be found in Appendix IV. The risk curves the agency intends to use have been scaled for a 56-year-old female and have been adjusted to take into account lowered bone density. At the time of the curve's development, the average age of an AIS 3+ injured occupant 5 ft 4 in or less in

[187] See 72 FR 51909. Docket No. NHTSA–29134. *https://federalregister.gov/a/07-4360.*

[188] NHTSA's review of NASS–CDS cases; see Real-World Data section. NHTSA data shows that 36% of AIS 3+ injuries in side impacts occurred to occupants 5 ft 4 in or less (small-stature). Sixteen percent of occupants in narrow object side impact crashes which received MAIS 3+ injuries were of small-stature.

[189] Details of these risk curves are provided in Appendix IV.

[190] NHTSA's review of NASS–CDS cases; see Real-World Data section.

[191] See 72 FR 51925. Docket No. NHTSA–29134. Available at *https://federalregister.gov/a/07-4360.*

[192] ''New Car Assessment Program,'' Docket No. NHTSA–2012–0180.

[193] NHTSA's review of NASS–CDS cases; see Real-World Data section.

[194] Jensen, J., Berliner, J., Bunn, B., Pietsch, H., Handman, D., Salloum, M., Charlebois, D., & Tylko, S., ''Evaluation of an Alternative Thorax Deflection Device in the SID–IIs ATD,'' The 21st International Technical Conference for the Enhanced Safety of Vehicles, Paper No. 09–0437, 2009.

height in side crashes was found to be 56 years.[195] Furthermore, this approach should ensure that safety information for the vulnerable population of occupants which the SID–IIs ATD is meant to represent is provided to the public. The agency seeks comment on whether this is an acceptable approach or whether the risk curves should be adjusted to a different age.

Lower Spine Acceleration—Lower spine (T12) resultant acceleration is also collected; currently, if it exceeds the criterion established in FMVSS No. 214 (82 g), the vehicle receives a Safety Concern designation for the applicable side impact test mode. Lower spine resultant acceleration was not included in the agency's upgraded consumer information program in MY 2011 because no validated risk curve was available at the time and there was no method by which to include performance limits in the star rating.[196] The agency still does not have a risk curve which it believes is appropriate for the SID–IIs ATD's lower spine resultant acceleration, but NHTSA intends to incorporate a performance criterion limit (IARV) for resultant lower spine acceleration for the SID–IIs ATD in this NCAP upgrade. Although deflection is thought to be the best indicator of injury, lower spine acceleration indicates the magnitude of overall loading to the thorax and may be able to detect injurious loads which the rib potentiometers may not. The agency seeks comment on an appropriate performance criterion limit for the SID–IIs ATD lower spine resultant acceleration.

c. WorldSID 5th Percentile Female ATD (WorldSID–5F)

i. Background and Current Status

After the development of the WorldSID–50M ATD in 2004, work on the WorldSID–5F ATD was initiated by the FP6 Advanced Protection System (or APROSYS) Integrated Project, a European Commission (EC) 6th Framework collaboration research project.[197] [198] APROSYS is a consortium of experts consisting of vehicle manufacturers, parts suppliers, universities/research institutions, and representative organizations from EU member states.[199] It was anticipated that a smaller version of the dummy could be nearly as, if not equally, biofidelic as the larger version. The hope was to create a family of dummies which provide consistent direction to manufacturers to design crashworthiness countermeasures for occupants of various sizes.[200] The first prototype was assembled in October 2005; Revision 1 (also called Build Level B) was developed in 2007–2008. The current build level is Build Level C.

As with the larger WorldSID ATD, the WorldSID–5F's anthropometrical requirements were determined from the 1983 UMTRI automotive posture and anthropometry study. The dummy's target mass is 45.8 kg (101 lb) +/− 1.2 kg (2.7 lb) when equipped with two half-arms. Similar to the WorldSID–50M ATD, the WorldSID–5F ATD is more reclined when seated in a vehicle seat.[201]

The WorldSID–5F ATD allows for 125 dynamic measurements to be evaluated, including those for the head, upper and lower neck, shoulder, thorax, abdomen, lumbar spine, pelvis, femur, and tibia. The dummy's ribs can be instrumented with 2D IR–TRACCs or with the RibEye™ optical measurement system, similar to the WorldSID–50M ATD.

Biofidelity performance parameters for this dummy originated from the WorldSID–50M ATD and were scaled for a 5th percentile female.[202] ISO/TR9790 biofidelity evaluation tests have not been performed for Build Level C, but testing carried out for the Build Level B dummy showed that the WorldSID–5F ATD is as biofidelic as the WorldSID–50M ATD.[203] Biofidelity ratings for the Build Level B dummy are shown below in Table 5. Humanetics believes that because the changes made for the Build Level C dummy were relevant to handling and durability only, they will not affect the biofidelity or dynamic response of the dummy.[204]

TABLE 5—WORLDSID–5F SIDE IMPACT DUMMY BIOFIDELITY—ISO RATINGS

	Head	Neck	Shoulder	Thorax	Abdomen	Pelvis	Overall
WorldSID–5F B	10	6.5	7.4	6.9	8.5	6.5	7.6

Sources: Eggers, A., Schnottale, B., Been, B., Waagmeester, K., Hynd, D., Carroll, J., & Martinez, L., ''Biofidelity of the WorldSID Small Female Revision 1 Dummy,'' The 21st International Technical Conference for the Enhanced Safety of Vehicles Conference, Paper No. 09–0420, 2009.; 71 FR 75347

ii. Testing, Issues, and Current Status

Testing conducted with the WorldSID–5F ATD shows that there are still issues to address concerning this dummy.

As mentioned, biofidelity testing was conducted by Eggers et al. in 2009 to determine whether the WorldSID–5F's dynamic response was appropriate for a 5th percentile female.[205] Six drop tests, 22 pendulum tests, and 27 sled tests were performed using a Build Level B dummy in this series. Some of the testing was not conducted: The 10 m/s abdominal pendulum test, for example, was not run because of a height restriction within the test facility. In these cases, a linear trend line was fitted to the lower-speed data and the higher-speed data was extrapolated from the trend. This analysis found that the chest

[195] Kuppa, S. ''Injury Criteria for Side Impact Dummies,'' National Highway Traffic Safety Administration, January 2006.

[196] See 73 FR 40029. Docket No. NHTSA–2006–26555. Available at *https://federalregister.gov/a/E8-15620*.

[197] Humanetics ATD, ''WorldSID 5th Small Female Dummy,' [*www.humaneticsatd.com/crash-test-dummies/side-impact/worldsid-5th*]. Accessed 25 Sep 2015.

[198] Been, B., Meijer, R., Bermond, F., Bortenschlager, K., Hynd, D., Martinez, L., & Ferichola, G., ''WorldSID Small Female Side Impact Dummy Specifications and Prototype Evaluation,'' The 20th International Technical Conference for the Enhanced Safety of Vehicles, Paper No. 07–0311, 2007.

[199] Versmissen, T., ''APROSYS Car to pole side impact activities,'' GRSP PSI meeting, March 2011.

[200] Carroll, J., Goodacre, O., Hynd, D., & Petitjean, A., ''Testing of the WorldSID–5F to Support Injury Risk Function Development and Assessment of Other Performance Issues,'' The 23rd International Technical Conference for the Enhanced Safety of Vehicles, Paper No. 13–0193, 2013.

[201] Louden, A. & Weston, D., ''WorldSID Status: 50th Male and 5th Female,'' Society of Automotive Engineers, Government/Industry Meeting, January 2014.

[202] Eggers, A., Schnottale, B., Been, B., Waagmeester, K., Hynd, D., Carroll, J., & Martinez, L., ''Biofidelity of the WorldSID Small Female Revision 1 Dummy,'' The 21st International Technical Conference for the Enhanced Safety of Vehicles, Paper No. 09–0420, 2009.

[203] Ibid.

[204] Humanetics ATD, ''WorldSID 5th Small Female Dummy,' [*www.humaneticsatd.com/crash-test-dummies/side-impact/worldsid-5th*]. Accessed 17 Sep 2015.

[205] Eggers, A., Schnottale, B., Been, B., Waagmeester, K., Hynd, D., Carroll, J., and Martinez, L., ''Biofidelity of the WorldSID Small Female Revision 1 Dummy,'' The 21st International Technical Conference for the Enhanced Safety of Vehicles, Paper No. 09–0420, 2009.

may be too stiff, and the authors suggested that the use of the resultant rib deformation, which overestimates the deformation, could compensate for the stiffness.

In an effort to further evaluate the WorldSID–5F's biofidelity and develop appropriate risk curves, TRL subjected the Build Level B dummy to additional pendulum and sled testing.[206] In this group of tests, 26 sled tests and 51 pendulum tests were performed. Unlike the previous testing undertaken by Eggers et al., some higher-severity tests, such as the 8.7 m/s Wayne State University thoracic impactor test and the 10 m/s Wayne State University pelvic impactor test, were not completed as planned as TRL felt that the ATD reached its maximum sustainable impact shortly after 6 m/s. Thus, the projected results from a more severe test were again achieved by fitting a straight line to the peak deflection results and extrapolating; TRL noted that this is not ideal. This analysis found that most of the ATD's body regions (shoulder, thorax, abdomen, and pelvis) are rather stiff.

It also uncovered some additional dummy design issues regarding shoulder load cell contact with the neck bracket, iliac wing contact with the sacro-iliac load cell and lumbar load cell cable cover, and upper central iliac wing contact with the lumbar spine mounting plate. For the shoulder, this contact may restrict the deflection allowed to 40 mm, depending on the vertical displacement of the rib.[207] The contacts within the pelvis were causing loading in unintended areas within the dummy. Humanetics modified parts to evaluate whether the contacts would be eliminated; contacts at lower speeds did not occur, but testing at higher impact speeds still showed iliac contact with the surrounding structures.[208] Also, prior testing with the WorldSID–50M ATD showed that interference may occur between the pelvic flesh and the lower abdominal rib, depending on how the dummy is seated. Interaction between the two causes the abdominal response to be stiffer. TRL's testing showed that this problem also exists for the WorldSID–5F ATD, though to a lesser degree as TRL believed that it is unlikely to occur with normal use of the dummy.

NHTSA has successfully performed full-scale vehicle crash tests with the WorldSID–5F prototype. In these tests, a WorldSID–50M ATD was seated in the driver's seat and a WorldSID–5F ATD was seated in the left rear seat. The vehicle was then subjected to the agency's MDB test at the side NCAP speed. Through these rounds of testing, it was determined that the WorldSID–5F ATD is durable; nothing was damaged in the NHTSA side MDB testing. A list of NHTSA database test numbers for these tests can be found in Appendix V.

Additional dummy issues have been identified over the course of the WorldSID–5F's testing. Material changes must be made in the head and pelvis. These limitations will require redesigns of the applicable sections of the dummy. Furthermore, risk curves for this dummy must be developed. These concerns must be addressed before the WorldSID–5F can be included in the next NCAP upgrade.

C. Crashworthiness Pedestrian Protection

NHTSA intends to implement vehicle crashworthiness tests for pedestrian safety in the NCAP program. The agency believes that including pedestrian protection in the NCAP program would have a beneficial impact on pedestrian safety. As will be discussed in a later section, the crashworthiness pedestrian safety assessment will be part of the new rating system.

1. Real-World Pedestrian Data

Since 1975 when NHTSA began tracking fatalities, there have been approximately 4,000 pedestrian fatalities and 70,000 pedestrian injuries on U.S. roads annually. In 2012, there were 4,818 pedestrian fatalities, which accounted for approximately 14 percent of all motor vehicle-related fatalities.[209]

The majority of fatal pedestrian crashes involve light vehicles.[210] About one-third of pedestrians who are injured are struck by an SUV or pickup truck (see Appendix VII, Table VII–1), which corresponds closely to the make-up of SUVs and pickups in the U.S. vehicle fleet. However, SUVs and pickups account for closer to 40 percent of pedestrian fatalities, which suggests that injuries may be more severe when sustained in collisions with these vehicles. Results from a meta-analysis of 12 independent injury data studies showed that pedestrians are 2–3 times more likely to suffer a fatality when struck by an SUV or pickup truck than when struck by a passenger car.[211] Laboratory tests reflect this real-world data observation.[212] [213] [214] The higher risk of fatality associated with being struck by an SUV or pickup also applies to a vulnerable population—children. In a study conducted by Columbia University, school-age children (5 to 19 years old) struck by light trucks were found to be twice as likely to die as those struck by passenger cars.[215] The risk was even greater for the younger set (ages 5–9); their fatality risk is four times greater from SUVs and pickup trucks than from passenger cars.

In comparison to motor vehicle occupants, the distribution of pedestrian fatalities is greater for age groups that include children and people over 45 years old (see Appendix VII, Figure VII–1). The agency believes that a crashworthiness pedestrian safety program in NCAP is necessary to stimulate improvements in pedestrian crashworthiness in new light vehicles sold in the United States and ultimately reduce pedestrian fatalities and injuries from vehicle crashes in the United States. Europe and Japan have responded to the high proportion of pedestrian fatalities compared to all traffic fatalities by including pedestrian protection in their respective NCAPs and requiring pedestrian protection through regulation. These actions have likely contributed to a downward trend in pedestrian fatalities in Europe and Japan (see Appendix VII, Figure VII–2).

As opposed to Europe and Japan, fatalities in the United States have remained steady over the last 14 years (see Appendix VII, Figure VII–3). The agency believes that including pedestrian protection in the NCAP program would be a step toward realizing similar downward trends experienced in regions of the world that

[206] Carroll, J., Goodacre, O., Hynd, D., & Petitjean, A., ''Testing of the WorldSID–5F to Support Injury Risk Function Development and Assessment of Other Performance Issues,'' The 23rd International Technical Conference for the Enhanced Safety of Vehicles, Paper No. 13–0193, 2013.

[207] Ibid.

[208] Ibid.

[209] Traffic Safety Facts, 2013, Pedestrians, DOT HS 812 124.

[210] Light vehicles (as referred to herein) include all vehicles with GVWR < 10,000 lbs, which generally includes all SUVs and pickup trucks.

[211] Desapriya, E. et al. (2010), ''Do light truck vehicles (LTV) impose greater risk of pedestrian injury than passenger cars? A meta-analysis and systematic review.'' Traffic Injury Prevention, V11:48–56, 2010.

[212] Kerrigan, J., Arregui, C., & Crandall, J.C., ''Pedestrian head impact dynamics: comparison of dummy and PMHS in small sedan and large SUV impacts,'' Paper No. 09–0127, The 21st International Technical Conference on the Enhanced Safety of Vehicles Conference, Stuttgart, Germany, June 15–18, 2009.

[213] Anderson, R. W. G. & Doecke, S. (2011), ''An analysis of head impact severity in simulations of collisions between pedestrians and SUVs, work utility vehicles, and sedans,'' Traffic Injury Prevention, V12(4):388–397, 2011.

[214] Ivarrson, B. J., Henary, B. et al. (2005), ''Significance of adult pedestrian torso injury,'' Annu Proc Assoc Adv Automot Med 49: 263–77.

[215] DiMaggio, C., Durkin, M., & Richardson, L. ''The association of light trucks and vans with pediatric pedestrian fatality.'' Int J Injury Contr and Safety Prom 2006; 13(2):95–99.

include pedestrians in their consumer information programs.

2. Current NCAP Activities in the U.S./World

NHTSA intends to implement vehicle crashworthiness tests for pedestrian safety. This plan follows the agency's April 2013 RFC in which it asked whether the agency should consider such testing in the NCAP program. Though opinion varied on its inclusion, a common thread among many commenters was a desire for worldwide harmonization of tests and protocols if a pedestrian testing or rating program was introduced. In consideration of this, the test procedures and scoring scheme that the agency plans to use is essentially the same as those of Euro NCAP.[216]

The speeds at which Euro NCAP conducts its pedestrian protection tests are supported by the agency's data regarding speeds at which the greatest number of pedestrian impacts occurred. However, the agency plans to conduct its own tests independently from Euro NCAP.

3. Planned Upgrade

The agency intends to use the Euro NCAP test procedures rather than those of KNCAP or JNCAP because the European fleet make-up, including vehicle sizes and classes, is more similar to the U.S. fleet. Moreover, the societal benefits of the Euro NCAP pedestrian component are well documented. Recent retrospective studies indicate that ratings are yielding positive results in the European Union (E.U.) based on studies of their effect on real-world crashes and injuries. One such study was reported by the Swedish Transport Administration in 2014. A correlation between higher rating in Euro NCAP pedestrian protection scores and reduced head injuries and fatalities was observed among Swedish pedestrians struck between January 2003 and January 2014.[217] Similar observations were observed by BAST [218] for pedestrian collisions in Germany in the years 2009 to 2011.

The following is a list of Euro NCAP documents that NHTSA plans to use as a basis for its own test procedures:

(1) Pedestrian Testing Protocol, Version 8.1, January 2015. This describes the vehicle preparation, the test devices and their qualification requirements, and procedures to carry out the tests.

(2) Pedestrian Testing Protocol, Version 5.3.1, November 2011. If a vehicle manufacturer elects not to provide NHTSA with headform impact assessment data, the headform test protocol in V5.3.1 will be followed in lieu of V8.1.

(3) Euro NCAP Pedestrian Headform Point Selection, V12. The routine contained within this (Microsoft Excel) file is used to generate verification points to be tested by NHTSA.

(4) Technical Bulletin TB 019, Headform to Bonnet Leading Edge Tests, Version 1.0, June 2014. This document describes a procedure for child headform testing under the special case when test grid points lie forward of the hood and within the grille or hood leading edge area.

(5) Film and Photo Protocol, Version 1.1, Chapter 8—Pedestrian Subsystem Tests, November 2014. This document describes camera set-up procedure only.

(6) Technical Bulletin, TB 013, Pedestrian CAE Models & Codes, Version 1.4, June 2015. This document lists various computer-aided engineering models that have been deemed acceptable for use by a vehicle manufacturer in demonstrating the operation and performance of an active hood.

(7) Technical Bulletin, TB 008, Windscreen Replacement for Pedestrian Testing, Version 1.0, September 2009. This document describes exceptions on bonding agents when windshields are replaced during the course of a vehicle test series.

(8) Assessment Protocol—Pedestrian Protection, Part 1—Pedestrian Impact Assessment, Version 8.1, June 2015. Once all test data are collected, this protocol is used to determine the results.

NHTSA intends to publish and maintain its own set of procedures and assessment protocols. However, the agency intends for them to be fundamentally the same as those described above, though some revisions will be needed to align with the agency's current practices under NCAP. Among such revisions is defining how manufacturers will communicate with NHTSA on providing information needed to conduct tests. Also, revisions may be necessary to account for differences in vehicle fleet composition (*i.e.,* test zone markup of large vehicles may differ slightly from Euro NCAP) or how the various test types are weighted to calculate the overall pedestrian protection score. NHTSA will consider whether to harmonize with any future revision put forth by Euro NCAP.

4. Test Procedures/Devices

The pedestrian safety assessment program the agency intends to implement is derived from multiple tests carried out on a stationary vehicle. The procedures are meant to simulate a pedestrian-to-vehicle impact scenario of either a 6-year-old child or an average-size adult male walking across a street and being struck from the side by an oncoming vehicle traveling at 40 km/hr (25 mph). This speed was selected by the GTR working group in the mid-2000s and is used as the basis for all subsequent international pedestrian regulations. It is also the target speed of all other NCAP procedures. The speed of 40 km/h (25 mph) was selected in part because the majority of pedestrian collisions occur at this speed or less. Though fatalities typically occur at higher speeds (70 km/h (43.5 mph) on average), a test speed above 40 km/h (25 mph) is not warranted due to the changing dynamics of a pedestrian-vehicle interaction as collision speeds increase. For pedestrian-related crashes above 40 km/h (25 mph), an initial hood-to-torso interaction takes place in which the pedestrian tends to slide along the hood such that the head impact overshoots the hood and windshield. Moreover, the practicability of designing a vehicle front-end to achieve a high rating becomes increasingly difficult due to energy dissipation required as the impact increases.

The first point of contact occurs between the front-end of the vehicle and the lateral aspect of an adult pedestrian's leg near the knee region. As the lower leg becomes fully engaged with the vehicle front-end, contact is made between the leading edge of the hood and the lateral aspect of the pedestrian's pelvis or upper leg. Then, as the lower leg is kicked forward and away from the front-end of the vehicle, the pedestrian's upper body swings abruptly downward towards the hood whereupon the head strikes the vehicle. Depending on the size of the pedestrian and vehicle, the head strikes either the hood or the windshield.

When colliding with high profile vehicles, the pedestrian's pelvis engages early with the vehicle's front structure. The upper body then rotates about the pelvis while wrapping around the hood. When a pedestrian is hit by a low

[216] NHTSA's plan as to how the pedestrian safety rating will factor into the overall vehicle rating is discussed later in this document, but that will not be identical to how Euro NCAP calculates their overall ratings.

[217] Standroth, J. et al. (2014), ''Correlation between Euro NCAP pedestrian test results and injury severity in injury crashes with pedestrians and bicyclists in Sweden,'' Stapp Car Crash Journal, Vol. 58 (November 2014), pp. 213–231.

[218] Pastor, C., ''Correlation between pedestrian injury severity in real-life crashes and Euro NCAP pedestrian test results,'' The 23rd International Technical Conference on the Enhanced Safety of Vehicles, Paper No. 13–0308, 2013.

profile vehicle, only his/her lower leg is engaged by the vehicle's front structure and the head is likely to be projected onto the hood or windshield as the whole body rotates. The dynamic tests included in this pedestrian protection assessment program that the agency intends to include in this NCAP upgrade would account for both low and high profile vehicle impact scenarios.

The targeted walking posture is one in which a pedestrian is side-struck. This posture was chosen because it represents one of the more common interactions between vehicles and pedestrians.[219] The side-struck posture is also regarded as ''worst case'' scenario for pedestrians (as in most likely to result in serious injury or death), which is supported by a recent study commissioned by the E.U.,[220] and the particulars for impact angle and impact velocity have been developed for that posture. The headforms used in the dynamic tests are hemispherical with no geometric characteristics for the face, which is beneficial in that the test procedure is generalized to mimic any head-to-hood/windshield interaction such as one resulting from a collision to a pedestrian who is struck from the rear while walking along the shoulder of the road.

The agency plans to conduct this pedestrian safety assessment program through a series of dynamic tests in which impactors are launched into the front-end of a stationary vehicle. Three different types of impactors, which are described in UNECE Regulation No. 127, ''Pedestrian protection,'' would be used to assess the front end of a vehicle:

• Headforms—Two separate hemispherical headforms are used to assess the safety performance of the hood, windshield, and A-pillar against a head injury to the pedestrian. One headform representing the head of an adult and the other the head of a 6-year-old child. Both measure 165 mm (6.5 in) in diameter and each has three parts: A main hemisphere, a vinyl covering, and an end plate. A triaxial arrangement of accelerometers is mounted within each. Though they look similar and their diameters are identical, the headforms are not the same. The adult headform is 4.5 kg (9.9 lb) and the child headform is 3.5 kg (7.7 lb). The injury risk associated with the headform measurement is based on HIC—a function of the tri-axial linear acceleration, which is well established and used in numerous occupant protection FMVSSs where HIC of 1000 represents a 48-percent risk of skull fracture.[221]

• Upper Legform—The upper legform is used to measure how well the hood leading edge (or the area near the junction of the hood and grille) can protect a pedestrian against a hip injury and potentially child head or thorax injury. The upper legform impactor is a rigid, foam-covered device, 350 mm (13.8 in) long with a mass of 9.5 kg (20.9 lb). The front member is equipped with strain gauges to measure bending moments in three positions. Two load transducers measure individually the forces applied at either end of the impactor. This test was developed by the European Experimental Vehicles Committee (EEVC) in the working group (WG) 7, 10, and 17. The pelvis/hip injury risk associated with the upper legform measurements was originally based on a series of crash reconstructions associating pelvis/hip injury with energy measurements.[222] [223] These injury risk functions were subsequently assessed in a number of studies prior to inclusion of this test in Euro NCAP.[224] [225] [226] [227]

• FlexPLI—A pedestrian leg impactor (known as FlexPLI) is used to assess the bumper areas's capability to protect a pedestrian from incurring an injury to the knee and lower leg. The FlexPLI consists of synthetic flesh and skin material that cover two flexible long-bone segments (representing the femur and tibia), and a knee joint. The assembled impactor has a mass of 13.2 kg (29.1 lb) and is 928 mm (36.5 in) long. Bending moments are measured at four points along the length of the tibia and three points along the femur. Three transducers are installed in the knee joint to measure elongations of the medial collateral ligament (MCL), anterior cruciate ligament (ACL), and posterior cruciate ligament (PCL). Knee ligament and bone fracture injury risk functions associated with FlexPLI ligament elongation and tibia bending moment measurements are detailed by Takahashi et al. (2012).[228]

These devices and their associated launching rigs are the same as those currently in use in all other international NCAP pedestrian test protocols. Thus, to the extent that U.S. manufacturers are testing vehicles using the test procedures for international NCAP programs, they already likely own these devices and have experience with the test protocols.

The contact areas, which include the vehicle front-end, the hood leading edge, the hood itself, and the windshield, are the main sources of injury.[229] Testing with the devices—the FlexPLI, the upper legform, and the headforms—would provide a means to establish separate safety assessment for each contact area, respectively. Multiple tests over the contact areas would be carried out with each device. In this manner, a grid pattern is formed over the entire front-end of the vehicle with safety scores established for each point. The scores are then combined to form an overall pedestrian safety score for the vehicle.

NHTSA estimates that including these test procedures in NCAP would have a positive impact on a significant portion of pedestrian injuries and fatalities. According to FARS and NASS General Estimates System (GES) 2012 data, there were 3,930 pedestrian fatalities and 65,000 pedestrian injuries that included a frontal (10–2 o'clock) impact with a vehicle. Figure VII–4 in Appendix VII indicates that 9 percent of fatalities (FARS 2012 curve) and 69 percent of injuries (GES 2012 curve) in 2012 occurred at or below a vehicle speed of

[219] Neal-Sturgess, C. E., Carter, E., Hardy, R., Cuerden, R., Guerra, L., & Yang, J., ''APROSYS European In-Depth Pedestrian Database,'' The 20th International Technical Conference on the Enhanced Safety of Vehicles, 2007.

[220] Soni, A., Robert, T., & Beillas, P. (2013), ''Effects of Pedestrian Pre-Crash Reactions on Crash Outcomes during Multi-body Simulations,'' 2013 IRCOBI Conference, Paper No. IRC–13–92.

[221] Eppinger, R. H., Sun, E., Bandak, F., Haffner, M., Khaewpong, N., Maltese, M., Kuppa, S., Nguyen, T., Takhounts, E., Tannous, R., Zhang, R., & Saul, R. (1999), ''Development of improved injury criteria for the assessment of advanced automotive restrain systems—II,'' National Highway Traffic Safety Administration, Washington, DC, November 1999.

[222] Lawrence, G., Hardy, B., & Harris, J. (1991). ''Bonnet Leading Edge Subsystem Test for Cars to Assess Protection for Pedestrians.'' The 13th International Technical Conference on the Enhanced Safety of Vehicles.

[223] Janssen, E., ''EEVC Test Methods to Evaluate Pedestrian Protection Afforded by Passenger Cars.'' The 15th International Technical Conference on the Enhanced Safety of Vehicles, 1996.

[224] Konosu, A. et al., ''A Study on Pedestrian Impact Test Procedure by Computer Simulation.'' The 16th International Technical Conference on the Enhanced Safety of Vehicles, Paper Number 98–S10–W–19, 1998.

[225] Matsui, Y. et al., ''Validation of Pedestrian Upper Legform Impact Test—Reconstruction of Pedestrian Accidents.'' The 16th International Technical Conference on the Enhanced Safety of Vehicles, Paper No. 98–S10–O–05, 1998.

[226] EEVC WG17 report (2002). ''Improved Test Methods to evaluate pedestrian protection afforded by passenger cars''.

[227] Snedeker, J. et al. (2003). ''Assessment of Pelvis and Upper Leg Injury Risk in Car-Pedestrian Collisions: Comparison of Accident Statistics, Impactor Tests, and a Human Body Finite Element Model.'' 47th Stapp Car Crash Journal, p. 437–457.

[228] Takahashi, Y., et al. (2012). Development of Injury Probability Functions for the Flexible Pedestrian Legform Impactor. SAE Paper No. 2012–01–0277.

[229] Mallory, A., et al. (2012), ''Pedestrian injuries by source: serious and disabling injuries in the U.S. and European Cases,'' Proceedings of the 2012 AAAM Conference.

40 km/h (25 mph), which is the baseline used in Euro NCAP test procedures. When these percentages are applied to the total fatalities and injuries, the target populations are 354 [3,930*9%] fatalities and 44,850 [65,000*69%] injuries. NHTSA's most detailed collection of pedestrian crash information was the Pedestrian Crash Data Study (PCDS) from 1994–1998. As shown in Figure VII–4 in Appendix VII, PCDS indicated that 32 percent of fatalities and 78 percent of injuries occurred at 40 km/h or lower, which, when applied to 2012 FARS/GES totals, would result in higher target populations of 1,258 [3930*32%] fatalities and 50,700 [65,000*78%] injuries. Based on GES 2012 and PCDS data, speeds at which pedestrians are getting hit by vehicles today are not significantly different than impact speeds 20 years ago, which supports PCDS as a reasonable comparative dataset for examining the distribution of impact speeds where fatalities and injuries occur.[230] Thus, a reasonable range of target population for pedestrian-related crashes in the United States is in the range of 354–1,258 fatalities and 44,850–50,700 injuries.

D. Crash Avoidance Technologies

NHTSA believes the greatest gains in highway safety in coming years will result from widespread application of crash avoidance technologies. Accordingly, the agency seeks to expand the scope of the NCAP program to rate crash avoidance and advanced technologies that NHTSA believes have potential to reduce the incidence of motor vehicle crashes and incorporate those ratings into the star rating system. Currently, crash avoidance technologies are not included in the star safety rating and, instead, are listed as ''Recommended Technologies'' on NHTSA's *Safercar.gov* Web site. As of today, the agency identifies vehicles equipped with Forward Collision Warning, Lane Departure Warning, and Rearview Video Systems as the Recommended Technologies that meet certain performance requirements.[231] When revisions to the NCAP program were implemented, NHTSA chose not to include crash avoidance tests in the star safety ratings based, in part, on comments submitted by manufacturers, trade associations, consumer groups, public health groups, and public citizens.[232] Initial market research in 2008 was inconclusive, but later market research in 2012 suggested that consumers may have lacked sufficient knowledge about advanced technologies prompting NHTSA to delay the incorporation of crash avoidance technologies in the star rating.[233] These technologies are becoming increasingly available in the market, and as a result consumers are becoming more familiar with them. NHTSA believes that by the time the planned upgrade to NCAP becomes effective, consumers will have a better understanding of the potential benefits of advanced crash avoidance technologies, making their inclusion in the 5-star ratings valuable to consumers.

In the intervening years, NHTSA believes that certain crash avoidance technologies have reached a level of technological maturity and will provide tangible safety benefits at reasonable costs. Further, the agency believes that, although we have seen a rapid increase in the number of passenger vehicles equipped with an expanding number of crash avoidance systems, some of which could be attributed to inclusion as a Recommended Technology, we believe that incorporating crash avoidance technologies into the star safety rating would help ensure that they are adopted more similarly to the crashworthiness tests; that is, faster and in more vehicles.

Thus, the agency believes it is now appropriate to include certain crash avoidance technologies into the overall star rating system. NHTSA believes a star rating in particular is necessary for crash avoidance technologies because consumers are already familiar with the 5-star approach to safety, while simply listing the available technologies on the label would potentially provide information without useful context. This NCAP upgrade would include the following crash avoidance technologies into the star ratings system: (1) Forward collision warning, (2) crash imminent braking, (3) dynamic brake support, (4) lower beam headlighting performance, (5) semi-automatic headlamp beam switching, (6) amber rear turn signal lamps, (7) lane departure warning, (8) rollover resistance, and (9) blind spot detection. Separately, NHTSA also intends to assess two additional crash avoidance systems, (1) pedestrian automatic emergency braking and (2) rear automatic braking, but the performance safety assessment results of those systems would be part of the pedestrian protection rating category under this NCAP upgrade. Consistent with the established criteria outlined in the April 2013 RFC,[234] the agency assessed whether the technology addresses a safety need; the system design is capable of mitigating the safety need; the technology provides safety benefit potential; and a repeatable test procedure exists. The agency reviewed available crash avoidance technologies and found the eleven crash avoidance technologies described in this RFC notice satisfy the established criteria.

Further, in contrast to a vehicle's crashworthiness performance, which can vary yet still provide a level of occupant protection, crash avoidance systems generally have a binary result: Either they avoid the crash or they do not. As a result, the agency cannot use the range-based star ratings found in crashworthiness and can, instead, only say whether the crash avoidance system on a vehicle either passes or fails the test. However, the agency still wishes to distinguish within the vehicles that pass the test to ensure that the highest ratings are for the safest vehicles. To do so, we recommend that stars be based on two criteria: Passing the test and prevalence of the technology within a given model line. Thus, if a vehicle model passes the test for a particular technology, it will get half credit if the technology is offered as an optional safety system and full credit if it is offered as standard for

[230] Differences between the low (FARS/GES) and the high (PCDS) estimates are most likely attributed to the way impact speed is determined: As reported by police in FARS/GES and by NHTSA accident investigative methods in PCDS. Considering this, PCDS estimates might appear more genuine. On the other hand, the PCDS is not considered a representative sample of the entire population and may be biased toward lower speed collisions. This would have the effect of inflating PCDS estimates of collisions under 40 km/hr. Also, any general improvement over time in vehicle design for pedestrian protection would be reflected in the (new, lower) FARS/GES estimates. Thus, the ranges given above are appropriate high and low bounds.

[231] Initially, NHTSA identified vehicles equipped with Electronic Stability Control (ESC), Forward Collision Warning and Lane Departure Warning as the Recommended Technologies in the prior round of revisions to the NCAP program, which began with MY 2011. ESC is now a required safety system on vehicles with a gross vehicle weight rating of 10,000 pounds or less. Beginning with MY2014, ESC was removed from the list of Recommended Technologies and Rearview Video Systems was added.

[232] On January 25, 2007 (see 72 FR 3472), NHTSA announced a Public Meeting (held March 7, 2007) and requested comments on a report titled, ''The New Car Assessment Program Suggested Approaches for Future Program Enhancements.'' Docket No. NHTSA–2006–26555 contains this report (file ID NHTSA–2006–26555–0005), the meeting transcript (file ID NHTSA–2006–26555–0093) and all of the comments. In the 2008 NCAP upgrade notice (73 FR 40016, 40033, July 11, 2008), the agency stated most [Public Meeting] commenters supported the proposal to implement a crash avoidance rating program. At that time, the agency decided to promote a selection of beneficial crash avoidance technologies and to defer implementation of a quantified rating system.

[233] In the 2012 follow-up quantitative study, ''Insight to Action, Monroney Label Research Qualitative Research Report, August 24, 2012,'' the agency found that consumers lacked sufficient knowledge about advanced crash avoidance technologies.

[234] See 78 FR 20599, April 5, 2013.

the model. The agency believes this is a reasonable approach because it allows the model to achieve a higher score if the specific vehicle being purchased has a particular technology, thus providing a benefit to that consumer, while incentivizing OEMs to more quickly expand the set of safety technologies available as standard safety equipment for particular model lines. We request comment on this approach, in particular concerning whether there are other ways to distinguish crash avoidance technology star ratings among different models.

The agency is aware of additional advanced safety applications and monitoring systems that are currently under development and, therefore, not ready for inclusion into the NCAP rating system at this time. These include intersection movement assist, lane keeping support, advanced automatic crash notification, driver alcohol detection system, and driver distraction guidelines. These are briefly discussed in this RFC notice. The agency notes that the current NCAP LDW test procedure includes supplemental tests for lane keeping support systems, which may be performed for informative purposes to expand NHTSA's knowledge of how such systems operate. While NHTSA believes that these systems are approaching the technical readiness and performance levels necessary before inclusion into the NCAP crash avoidance rating, NHTSA will consider them in the future as the technologies mature and more research becomes available.

Table 6 shows available crash avoidance technologies that NHTSA believes could mitigate each crash type, as well as the predominant pre-crash scenarios within each crash type. NHTSA defined and statistically described this pre-crash scenario typology for light vehicles (passenger car, sports utility vehicle, minivan, van, and light pickup truck) based on the 2004 GES crash database.[235] This typology consists of 37 pre-crash scenarios that depict vehicle movements and dynamics as well as the critical event occurring immediately prior to a crash. Excluding the ''other'' scenario, this pre-crash scenario typology represents about 99.4 percent of all light-vehicle crashes.[236] The percentage shown below each crash type in the first column of Table 6 is the 2010 incidence rate for all motor vehicle crashes estimated based on a fairly straightforward examination of the data in NHTSA's two primary databases, FARS and GES.[237]

[235] DOT HS 810 767 (April 2007), available at *www.nhtsa.gov/DOT/NHTSA/NRD/Multimedia/PDFs/Crash%20Avoidance/2007/Pre–Crash_Scenario_Typology-Final_PDF_Version_5–2–07.pdf.*

[236] The scenario labeled ''other'' in the typology encompasses the remaining crashes that are coded as ''Other,'' ''Unknown,'' or ''No Impact'' in the Accident Type variable in the NASS crash database; possible scenarios may include hit-and-run, no driver present, non-collision incident and other non-specific or no-details scenarios.

[237] DOT HS 812 013 (revised May 2015), *www-nrd.nhtsa.dot.gov/Pubs/812013.pdf.*

		Crash Avoidance Technologies										
Crash Type (2010 Incidence)	Pre-Crash Scenario	FCW	CIB	DBS	Rear auto-braking	Lower beam	Beam switching	Amber turn	LDW	Blind Spot	Pedestrian AEB	Rollover Rating
Rear-end (29%)	Lead vehicle stopped	●	●	●				●				
	Lead vehicle decelerating	●	●	●				●				
	Lead vehicle moving at lower constant speed	●	●	●				●				
	Following vehicle making a maneuver							●				
	Lead vehicle accelerating	●	●	●								
Crossing Paths * (24%)	Vehicle(s) turning at non-signalized junctions											
	Straight crossing paths at non-signalized junctions											
	Left Turn Across Path/Opp. Dir. at signalized junctions							●				
	Left Turn Across Path/Opp. Dir. non-signalized junctions							●				
	Running red light											
	Running stop sign					●	●					
	Vehicle turning right at signalized junctions							●				
Road Departure (19%)	Road edge departure without prior vehicle maneuver					●	●		●			●
	Road edge departure with prior vehicle maneuver					●	●					
	Road edge departure while backing up											
	Evasive action with prior vehicle maneuver					●	●					●
	Evasive action without prior vehicle maneuver					●	●					●
Lane Change (12%)	Vehicle(s) changing lanes - same direction							●		●		
	Vehicle(s) turning - same direction							●		●		
	Vehicle(s) drifting - same direction								●	●		
	Vehicle(s) parking - same direction							●		●		
Animal (6%)	Animal crash without prior vehicle maneuver					●	●					
	Animal crash with prior vehicle maneuver					●	●					
Opposite Direction (2%)	Vehicle(s) making a maneuver - opposite direction						●	●				
	Vehicle(s) not making a maneuver - opposite direction								●			
Backing (2%)	Backing up into another vehicle				●							
Pedestrian (1%)	Pedestrian crash with prior vehicle maneuver				●	●	●				●	
	Pedestrian crash without prior vehicle maneuver				●	●	●				●	
Pedalcyclist (1%)	Pedalcyclist crash with prior vehicle maneuver				●	●	●					
	Pedalcyclist crash without prior vehicle maneuver				●	●	●					
Object (1%)	Object crash with prior vehicle maneuver	●			●	●	●					
	Object crash without prior vehicle maneuver	●	●	●	●	●	●					

* Crossing Paths crashes are anticipated to be mitigated by future crash avoidance technologies that are assisted by vehicle-to-vehicle communications.

As Table 6 shows, no one technology listed addresses all crash events. Collectively, the crash avoidance technologies listed, with the exception of amber rear turn signal lamps, would alert and better inform the driver about unsafe conditions surrounding the vehicle, and in some circumstances would automatically brake to avoid or mitigate a collision. As the agency works to quantify the individual and collective contributions of crash avoidance technologies, qualitative interpretations of the information in Table 6 suggest that vehicles offering more safety advances would increase the opportunities to avoid crashes, including those involving pedestrians and pedalcyclists. Ideally, as future crash avoidance technologies emerge and are deployed, each crash type will have multiple technologies poised to respond in an effort to prevent or mitigate crashes. Some technologies may offer modest individual contributions compared to others, but each has a key role to play in the overall effort to prevent or mitigate crashes. The three lighting technologies are impactful to three-quarters of the crash scenarios listed. Warning technologies and AEB systems are expected to directly impact the incidence of approximately one-third of the crash scenarios listed. Rollover resistance has a narrow application to prevent untripped on-road rollovers and possibly mitigate roadway departure crashes; however, other crash avoidance technologies may contribute by helping to avoid a tripping mechanism thereby potentially preventing a rollover.

To eliminate data voids and to improve data collection in support of benefit estimate calculation and the NCAP crash avoidance rating, NHTSA seeks to collaborate with manufacturers to improve the value of the coded vehicle identification number (VIN) attributes to NHTSA, by indicating the presence of crash avoidance

technologies. It is NHTSA's desire to identify crash avoidance technologies through a combination of characters available within the VIN to facilitate statistical analysis. NHTSA hopes to work with manufacturers to voluntarily make these changes. This effort would not alter any of manufacturers' current VIN requirements under Part 565. Manufacturers will continue to provide to NHTSA, as required by Part 565, a key that deciphers VIN information. Additionally, this crash avoidance information will not communicate system performance or directly inform the consumer. The safety rating of the Monroney label and the *Safercar.gov* Web site would remain the primary means for the agency to communicate rating information to consumers. Title 49 CFR part 565 requires a vehicle manufacturer to assign a unique VIN to each vehicle that it produces. The five characters in VIN positions 4 through 8 uniquely identify attributes of the vehicle. For passenger cars, the attributes are make, line, series, body type, engine type, and all restraint devices and their location. The characters utilized and their placement within the section may be determined by the vehicle manufacturer, but the specified attributes must be decipherable with information supplied by the vehicle manufacturer.

Separately, NHTSA is developing a software catalog called the NHTSA Product Information Catalog and Vehicle Listing (vPIC) to organize the VIN information for rapid access and decoding of information that is submitted by the vehicle manufacturers. Access to this catalog was made available recently to the public.[238]

We emphasize that NHTSA is not pursuing a change to the VIN requirement. The agency recognizes that capturing standard versus optional equipment for each VIN is a challenge. To address this challenge, the agency requests comment on whether to collaboratively pursue coding specific crash avoidance technologies and combinations into the VIN, which would be associated to the make, model, trim, and model year levels.

1. Emergency Braking: Warning and Automatic Systems

An Automatic Emergency Braking (AEB) system uses forward-looking sensors, typically radars and/or cameras, to detect vehicles on the roadway. When a rear-end crash is imminent, if the driver takes no action, such as braking or steering, or if the driver does brake but does not provide enough braking to avoid the crash, the system may automatically apply or supplement the brakes to avoid or mitigate the rear-end crash. AEB systems feature technologies that provide forward collision warning (FCW) alerts, as well as crash imminent braking (CIB) and/or dynamic brake support (DBS), which are specifically designed to help drivers avoid, or mitigate the severity of, rear-end crashes. CIB systems provide automatic braking when forward-looking sensors indicate that a crash is imminent and the driver has not braked, whereas DBS systems provide supplemental braking when sensors determine that driver-applied braking is insufficient to avoid an imminent crash.

Approximately 1.7 million rear-end crashes occur each year.[239] Not all of these are expected to benefit from AEB technology in general. NHTSA has identified a target population that is the subset of these crashes that could potentially be avoided or mitigated by AEB systems. These crashes involve an estimated 2,700,000 persons per year, and a total annual cost of $47 billion. More than 400,000 people are injured and over 200 people are killed in rear-end crashes each year. The agency developed a detailed target population in a June 2012 research report, finding that 910,000 crashes per year could potentially be avoided or mitigated with FCW, CIB, and DBS systems (collectively referred to as AEB systems here).[240]

The agency intends to use a new crash avoidance rating scheme that would depart from the current NCAP checkmark for Recommended Advanced Technologies Features. AEB is one of the systems that would contribute to the crash avoidance rating system calculation. The evaluation metrics for AEB systems in the new NCAP rating would be pass-fail. If a vehicle satisfies the performance requirements for each test scenario, the vehicle would receive credit for being equipped with the technology. If an AEB system is offered as an optional safety technology, the vehicle model would receive half credit for this technology. If an AEB system is a standard safety technology, the vehicle model would receive full credit for this technology.

a. Forward Collision Warning (FCW)

NHTSA intends to include FCW in its NCAP crash avoidance rating. The agency intends to use the same test procedures for FCW that it is currently using for the Recommended Advanced Technology Features on *Safercar.gov.*

The FCW system is based on two components: A sensing system capable of detecting a vehicle in front of the subject vehicle, and a warning system sending a signal to the driver. The sensing system consists of forward-looking radar, lidar, camera systems, or a combination thereof. The sensor data are digitally processed by a computer software algorithm that determines whether an object it has detected poses a safety risk (*e.g.,* is a motor vehicle, etc.), determines if an impact to the detected vehicle is imminent, decides if and when a warning signal should be sent to the driver, and finally, sends the warning signal. The warning may be a visual signal, such as a light on the dash, an audio signal, such as a chime or buzzer, or a haptic feedback signal that applies rapid vibrations or motions to the driver. Based on NCAP testing, the typical haptic signals currently used for FCW systems are vibrations from the seat pan and/or steering wheel. The purpose of the FCW system is to alert the driver to the potential crash threat. The desired corrective action is to have the driver assess the situation, recognize the pending danger, and engage braking or steering to evade the possible rear-end crash event. FCW systems are typically the first technologies deployed in an AEB system currently available in many production motor vehicles.

The sensors, computers, algorithms, and warning systems used in FCW systems have evolved since these systems were first developed. Field experience and consumer feedback to vehicle manufacturers have reportedly enabled them to improve the reliability and consumer acceptance of these systems.

NHTSA previously determined the effectiveness of FCW technology from a field operational test (FOT) conducted between March 2003 and November 2004.[241] Sixty-six participants drove a total of about 163,000 km during the FOT, including 64,000 km with FCW. The analysis of this study reported a potential FCW effectiveness of 15 percent in reducing rear-end crashes. Additionally, this effectiveness was reported in the 2008 **Federal Register**

[238] NHTSA Product Information Catalog and Vehicle Listing (vPIC) available at *http://vpic.nhtsa.dot.gov.*

[239] Automatic Emergency Braking System (AEB) Research Report, August 2014. Available at *www.regulations.gov*, Docket No. NHTSA–2012–0057–0037, page 9.

[240] Forward-Looking Advanced Braking Technologies Research Report, NHTSA, June 2012; available at *www.regulations.gov*, Docket No. NHTSA–2012–0057–0001.

[241] Evaluation of Automated Rear-End Collision Avoidance Systems. DOT HS 810 569, April 2006. Available at *www.nhtsa.gov/DOT/NHTSA/NRD/Multimedia/PDFs/Crash%20Avoidance/2006/HS910569.pdf.*

notice which included FCW in the first phase of assessing crash avoidance technologies within the NCAP program.[242]

The agency recently revisited its calculations for the target population and the potential benefits estimates for FCW. The agency also calculated the overall effectiveness of all three AEB systems combined, which included CIB, DBS, and FCW. Although several studies show potential benefits, the estimated effectiveness of the systems varies from study to study. Further, these studies used prototype systems whose performance may vary from actual production systems. Additionally, the target population (those crashes that would be favorably affected by the installation and operation of these technologies) is not always well-defined and also varies considerably between studies. Preliminary benefits estimated based on three research vehicles with FCW, CIB, and DBS combined could prevent 94,000–145,000 minor injuries (AIS 1–2), 2,000–3,000 (AIS 3–5) serious injuries, and save 78–108 lives annually.[243] In this analysis, FCW accounted for reducing 53,000 minor injuries (AIS 1–2), 1,260 serious injuries (AIS 3–5) and 35 fatalities.

The test procedure for FCW was originally published in 2008, and became part of NCAP in MY 2011. Minor updates have been placed in the docket for this program. For the 2016 MY NCAP evaluation, NHTSA will use the version titled ''Forward Collision Warning System Confirmation Test, February 2013,'' which is available on the *Safercar.gov* Web site [244] and in the 2006 docket for Revisions to NCAP.[245] NHTSA will rely on this version to establish FCW system performance and inclusion in the agency's Recommended Advanced Technology Features on *Safercar.gov.*

The NCAP FCW test procedure consists of three scenarios selected because they simulate the most frequent rear-end scenarios. The subject vehicle (SV) used in this test is the vehicle being assessed. The principle other vehicle (POV) is a vehicle directly in front of the SV. In NHTSA's FCW performance evaluations, the POV is a production mid-size passenger vehicle.

In the first FCW scenario, the lead vehicle stopped (LVS) scenario, the SV encounters a stopped POV on a straight road. The SV is moving at 45 mph (72 km/h) and the POV is not moving, or 0 mph (0 km/h). To pass this test, the SV FCW alert must be issued when the time-to-collision (TTC) is at least 2.1 seconds. In the second FCW test, the lead vehicle decelerating (LVD) scenario, the SV follows the POV traveling on a straight, flat road at a constant speed of 45 mph (72 km/h) and a constant time gap. Then the SV encounters a decelerating POV braking at a constant deceleration of 0.3g. In order to pass this test, the FCW alert must be issued when TTC is at least 2.4 seconds. In the third FCW test, the lead vehicle moving (LVM) scenario, the SV encounters a slower-moving POV. Throughout the test, the SV is driven at 45 mph (72 km/h) and the POV is driven at a constant speed of 20 mph (32 km/h). In order to pass this test, the FCW alert must be issued when TTC is at least 2.0 seconds. All of these tests are conducted on a straight, high-quality surface test track. The relative speeds and times to collision are calculated using a differential global positioning system (GPS) installed in each of the two vehicles. The tests are conducted using two professional drivers. If the FCW system fails to alert the rear driver within the required time, the driver of the SV steers away to avoid a collision.

The FCW test scenarios directly relate to NHTSA crash data. These scenarios were developed for NCAP and added to the program in MY 2011. The scenarios were analyzed again in the development of the CIB and DBS test programs.[246] NHTSA data indicates LVS scenario in which the struck vehicle was stopped at the time of impact occurred in 64 percent of the rear-end crashes. The LVD scenario in which the struck vehicle was decelerating at the time of impact occurred in 24 percent of the rear-impact crashes. The LVM scenario in which the struck vehicle was moving at a constant but slower speed, compared to the striking vehicle occurred in 12 percent of the rear-end crashes.

The time-to-collision criteria used in each scenario represents the estimated time that would be needed for a driver to perceive a pending crash, discern the correct action to take, and take the mitigating action.[247] NHTSA believes that the alerts are sufficient for a driver to react and avoid many of these rear-end crashes.

The agency seeks comments on whether to only award FCW credit if the SV is equipped with a haptic FCW.

b. Crash Imminent Braking (CIB)

NHTSA intends to include CIB in its overall crash avoidance rating for NCAP. CIB is a crash avoidance system that uses information from forward-looking sensors to determine whether a crash is imminent and whether it is appropriate to automatically apply the brakes. CIB systems are designed to activate automatically when a vehicle (the SV) is about to crash into the rear of another vehicle (the POV) and the SV's driver makes no attempt to avoid the crash. The systems typically consider whether the SV driver has applies the brakes and/or turned the steering wheel before intervening.

Current CIB sensor systems include radar, lidar, and/or vision-based camera sensors capable of detecting objects in front of the vehicle. Although some CIB systems currently in production can detect objects other than vehicles, NCAP test procedures would test the capability of systems to detect and activate only for vehicles in front of the subject vehicle. NHTSA is not planning to test a system's ability to detect and brake for other objects at this time. NHTSA believes that it will be able to accommodate alternative sensing methods in the future with minor test set-up modifications.

Pedestrian AEB systems are discussed later in this RFC notice. NHTSA does not plan to consider the capability of crash avoidance systems to detect and respond to other objects, such as animals or road obstructions in this NCAP upgrade. However, NHTSA encourages vehicle manufacturers to include detection of other objects in their CIB algorithms to avoid these other crash types.

CIB systems typically rely on the same forward-looking sensors used by FCW. NHTSA testing indicates CIB interventions generally occur after the FCW alert has been issued, although NHTSA has found some interventions to be coincident. The amount of braking authority varies among manufacturers, with several systems achieving maximum vehicle deceleration just prior to impact.

CIB is one of the earliest generations of automatic braking technologies.

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[242] See 73 FR 40033. Docket No. NHTSA–2006–26555. Available at *https://federalregister.gov/a/E8-15620.*

[243] Forward-Looking Advanced Braking Technologies Research Report, NHTSA, DOT, June 2012. Available at *www.regulations.gov*, NHTSA–2012–0057–0001.

[244] Available at *www.safercar.gov/Vehicle+Shoppers/5-Star+Safety+Ratings/NCAP+Test+Procedures.*

[245] See *www.regulations.gov*, Docket No. NHTSA–2006–26555–0134.

[246] See *www.regulations.gov*, Docket No. NHTSA–2012–0057–0037, page 10.

[247] The time-to-collision criteria were examined in a NHTSA FCW performance evaluation. See *www-nrd.nhtsa.dot.gov/pdf/esv/esv21/09-0561.pdf.*

When an object in front of the forward-moving SV is detected, a computer software algorithm reviews the available data from the input signal of the sensing system. If the algorithm determines that a rear-end crash with another motor vehicle is imminent, then a signal is sent to the electronic brake controller to automatically activate the SV brakes.

The agency tentatively found that if CIB functionality is installed on all light vehicles without other AEB systems (*i.e.,* FCW and DBS), it could potentially prevent approximately 40,000 minor-to-moderate injuries (AIS levels 1 and 2), 640 serious-to-critical injuries (AIS levels 3–5) and save approximately 40 lives, annually.[248] Crash severity is often characterized by the speed differential associated with the collision. It is a measure of the difference in velocity of the striking and struck vehicles just before and just after the impact occurs. The reduction in injuries ascribed to CIB without other AEB systems was estimated using injury risk versus delta-v curves that have been previously used by the agency for its light vehicle tire pressure monitoring system. NASS–CDS police-reported estimates of tow-away crashes were adjusted to reflect all police-reported rear-impact crashes. At this time, all production CIB systems provide an FCW warning before the CIB system automatically applies the brakes. Therefore, safety benefits from CIB would be incremental to the benefits from an FCW alert.

To evaluate CIB (and the DBS mentioned below) on the test track, NHTSA developed the Strikeable Surrogate Vehicle (SSV), a surrogate vehicle modeled after a small hatchback car and fabricated from light-weight composite materials including carbon fiber and Kevlar®. The SSV appears as a ''real'' vehicle to the sensors used by contemporary CIB systems. For NCAP CIB tests, the agency intends to use the SSV as the POV.[249]

NHTSA's current CIB test procedure is comprised of three scenarios similar to the FCW scenarios (for a total of 4 tests) and one false-positive test (conducted at two speeds). For this NCAP upgrade, the agency intends to use the CIB test procedure specified in the recent AEB final decision notice.[250] In the LVS test, the SV approaches a stopped POV at 25 mph (40.2 km/h). In the LVM test, two SV/POV speed combinations would be used; first, the SV would be driven at 45 mph (72.4 km/h) toward a POV traveling at 20 mph (32.2 km/h); and second, the SV would be driven at 25 mph (40.2 km/h) toward a POV traveling at 10 mph (16.1 km/h). In the LVD test, the SV and POV would both be driven at 35 mph (56.3 km/h) with an initial headway of 45.3 ft (13.8 m), and then the POV would decelerate at 0.3g. In the Steel Trench Plate (STP) False Positive Test, two test speeds would be used; the SV would be driven over a 8 ft x 12 ft x 1 in (2.4 m x 3.7 m x 25 mm) steel trench plate at 45 mph (72.4 km/h) and 25 mph (40.2 km/h). Each scenario would be run up to seven times. To pass the NCAP performance criteria, the SV would need to pass five out of seven trials, and pass all six tests.

The CIB test scenarios directly relate to NHTSA crash data. Rear-end crashes are coded within the NASS–GES into the three major categories that denote the kinematic relationship between the striking and struck vehicle: LVM, LVD, and LVS. NHTSA's analysis of the crash data in support of the June 2012 research report on CIB systems showed that the target population of rear-end crashes (average during the years 2005 through 2009) was approximately 64 percent LVS scenarios, 24 percent LVD scenarios, and 12 percent LVM scenarios.[251]

For CIB, the NCAP performance criteria are speed reductions. Nominally, the magnitude of the speed reduction assigned to each test scenario corresponds to an effective deceleration of 0.6g from a TTC of 0.6 seconds. In the case of the CIB false positive tests, the performance criteria is a non-activation, where the SV must not achieve a peak deceleration equal to or greater than 0.5g at any time during its approach to the steel trench plate. These criteria were developed using NHTSA test data collected during 2011, and were intended to promote safety-beneficial and attainable performance.

The metrics include:

TABLE 7—CIB TEST METRICS

Test scenarios	Speed (mph)		Criterion
	Subject vehicle	Surrogate target vehicle	
Lead Vehicle Stopped	25	0	≥9.8 mph (15.8 km/h).
Lead Vehicle Moving	45	20	≥9.8 mph (15.8 km/h).
Lead Vehicle Moving	25	10	Crash Avoided.
Lead Vehicle Decelerating	35	35	≥10.5 mph (16.9 km/h).
Steel Trench Plate	45	Not applicable	No Activation (Deceleration of ≤0.5g).
Steel Trench Plate	25	Not applicable	No Activation (Deceleration of ≤0.5g).

If all tests are passed, the vehicle would receive credit for having the CIB system as calculated in the Crash Avoidance rating system calculation. If CIB is offered as an optional safety system, the vehicle model would receive half credit for this system. If CIB is offered as standard safety system, the vehicle model would receive full credit for this system.

c. Dynamic Brake Support (DBS)

DBS applies supplemental braking in situations in which the system has determined that the braking applied by the driver is insufficient to avoid a collision. Typically, DBS relies on information provided by forward-looking sensor(s) to determine when supplemental braking should be applied. FCW most often works in concert with DBS by first warning the driver of the situation and thereby providing the opportunity for the driver to initiate the necessary braking. If the driver's brake application is insufficient, DBS provides the additional braking needed to avoid or mitigate the crash.

DBS is similar to CIB; the difference is that CIB activates when the driver has not applied the brake pedal, and DBS

[248] See *www.regulations.gov*, Docket No. NHTSA–2012–0057–0037, page 16.

[249] See *www.regulations.gov*, Docket No. NHTSA–2015–0006–0024, AEB Final decision notice.

[250] Ibid.

[251] See *www.regulations.gov*, NHTSA–2012–0057–0001.

will supplement the driver's brake input. When an object in front of the forward-moving SV is detected, a computer software algorithm reviews the available data from the input signal of the sensing system. If the algorithm determines that a collision with an object in front of the SV is imminent and that the driver has applied the brakes, but not adequately, a signal is sent to the electronic brake controller. Then the brake system automatically provides additional braking.

DBS differs from a traditional brake assist system used with the vehicle's foundation brakes. With the foundation brakes, a conventional brake assist system applies additional braking by automatically increasing the brake power boost when the system identifies that the driver is in a panic-braking situation based on the driver's brake pedal application rate or some other means of sensing that the driver is in an emergency braking situation. This results in more pedal travel for the same braking force applied by the driver. DBS uses the forward-looking sensor information to determine that additional braking is needed, unlike conventional brake assist, which uses the driver's brake pedal application rate to determine that the driver is attempting to initiate emergency braking but may not be strong enough to fully apply the brakes.

While CIB and DBS are applicable to the same crash scenarios, the target population for CIB is a group where the driver does not apply the brakes before a crash. With DBS, the driver has braked insufficiently, and CIB is designed to address scenarios in which the driver has failed to brake. Using the assumptions previously defined in the AEB paragraph and applying them to the target population, the agency tentatively found that if DBS functionality alone is installed on all light vehicles, it could potentially prevent approximately 107,000 minor/moderate injuries (AIS 1–2), 2,100 serious-to-critical injuries (AIS 3–5), and save approximately 25 lives, annually. The safety benefits from DBS would be incremental to the benefits from an FCW alert.

The DBS test scenarios directly relate to NHTSA crash data. The previously described three major rear-impact crash categories that denote the kinematic relationship between the striking and struck vehicle are LVM, LVD, and LVS. NHTSA's analysis of the crash data in support of the June 2012 research report on CIB and DBS systems showed that the target population was approximately 64 percent LVS scenarios, 24 percent LVD scenarios, and 12 percent LVM scenarios of rear-impact crashes.[252]

Similar to CIB, NHTSA intends to use the SSV as the POV to evaluate the DBS system on a test track. Also, like CIB, the agency intends to use the DBS test procedure specified in the recent AEB final decision notice. In the NCAP assessment, the DBS and the CIB systems would be evaluated separately, however, the DBS test procedures are nearly equivalent to the CIB test procedures. The DBS test brake application would be conducted with the use of a mechanical brake applicator, rather than a human test driver. Each scenario would be run up to seven times. To pass the NCAP performance criteria, the subject vehicle would need to pass five out of seven trials, and pass all the scenarios.

The DBS performance criteria for the LVS, LVM, and LVD scenarios specify that the SV must avoid contact with the POV. In the case of the DBS false positive tests, the performance criterion is a non-activation, where the SV must not achieve a peak deceleration ≥150 percent greater than that achieved with the vehicle's foundation brake system alone during its approach to the steel trench plate. If all tests are passed, the vehicle would receive credit for having the technology, as calculated in the Crash Avoidance rating system calculation. If DBS is offered as an optional safety system, the vehicle model would receive half credit for this system. If DBS is offered as standard safety system, the vehicle model would receive full credit for this system.

2. Visibility Systems

NHTSA intends to include three lighting safety features in this NCAP upgrade: Lower beam headlighting performance, semi-automatic headlamp beam switching between upper and lower beams, and amber rear turn signal lamps. Guided by the limited data that exist, the agency believes that these visibility systems offer positive safety benefits with minimal burden to the manufacturers.

a. Lower Beam Headlighting Performance

To assist driving in darkness, FMVSS No. 108 requires passenger cars and trucks to have a headlighting system with upper beam and lower beam headlamps. While FMVSS No. 108 establishes a minimum standard for headlamp performance which has resulted in reduced injuries and fatalities, NHTSA believes that lower beam headlamp performance beyond the minimum requirements of FMVSS No. 108 will result in additional safety benefits.

The FARS database shows 47 percent (14,190 of 30,057) of the fatal crashes in 2013 were attributed to the light condition categories of dark–lighted, dark–not lighted, and dark–unknown lighting.[253] Specifically for pedestrians, the FARS database shows 71 percent (3,340 of 4,704) of the fatal crashes involving pedestrians in 2013 were attributed to the light condition categories of dark–lighted, dark–not lighted, and dark–unknown lighting. In 2013, 4,735 pedestrians were killed in traffic crashes, representing 14 percent of all fatalities that year. Pedestrians are at a higher risk of injury or fatality during darkness than they are during times of higher ambient illumination.[254] Sullivan and Flannagan (2001) concluded that the risk of pedestrian deaths is substantially greater in darkness, and that risk difference appears to increase continuously with increased traffic speed. Taking these two factors together, the agency predicts that increased vehicle luminance will reduce the risk of pedestrian fatalities at night. As shown in Table 6, the lower beam headlighting performance maps to prevent or mitigate 13 of the 32 crash scenarios, including both pedestrian crash scenarios.

While extended illumination distance may better inform drivers so as to avoid striking pedestrians, this additional light could have unintended consequences if it is not properly controlled to limit glare. As such, the test procedure presented in Appendix VIII of this RFC notice grades a vehicle's headlighting system's lower beams for seeing light far down the road, but reduces the score for a headlighting system that produces glare beyond 0.634 lux, measured at a distance of 60 m (197 ft) and at a height of 1000 mm (39.7 in) above the road. Unlike the current test procedure for the FMVSS No. 108 requirement that evaluates a headlamp in a laboratory, this NCAP test would evaluate the headlighting system as installed on the vehicle. In order to support reproducibility of the test results, the headlighting system would be measured using seasoned bulbs and the headlamps would be aimed according to the manufacturer's recommendation prior to conducting the test. Five levels of performance would

[252] See *www.regulations.gov*, NHTSA–2012–0057–0001.

[253] FARS Database Query Tool available at *www-fars.nhtsa.dot.gov//QueryTool/QuerySection/SelectYear.aspx*.

[254] Sullivan, J. M. & Flannagan, M. J. (2001). Characteristics of Pedestrian Risk in Darkness (UMTRI–2001–33).

be established based on the measurement of five illuminance meters located 75 to 115 meters (246 ft to 377 ft) (spaced 10 m (32.8 ft) apart) forward of the vehicle. The level of performance would be established based on the lower beam headlighting system's ability to provide 3.000 lux of light to each of the five detectors. If all five detectors are illuminated to at least 3.000 lux and the glare detector is illuminated at less than 0.634 lux, the headlighting system would receive full credit within the final crash avoidance rating. If the glare meter is illuminated beyond 0.634 lux, the headlighting systems scoring would be reduced as detailed in the test procedure (see the docket, Appendix VIII).

b. Semi-Automatic Headlamp Beam Switching

NHTSA intends to include semi-automatic headlamp beam switching in its crash avoidance NCAP rating because the agency believes it could lead to reductions of injuries and fatalities, particularly for pedestrians during darkness. FMVSS No. 108 requires each vehicle to have the ability to switch between lower and upper beam headlamps. As an option, a vehicle may be equipped with a semi-automatic device to switch between the lower and upper beam, which means the vehicle may automatically switch the headlamps from upper to lower beams and back based on photometric sensors installed as part of the semi-automatic beam switching system. While these systems switch the beams automatically, they are not fully-automatic in that they must allow the driver to have control of the system and manually switch beams based on the driver's input. The photometric design of the upper beam headlamp is optimized to provide long seeing distance. However, upper beam headlamps provide limited protection to other roadway users against glare. Therefore, properly switching between the upper and lower beam headlamps maximizes the overall seeing distance when driving at night without causing glare. While state laws often impose driver upper beam restrictions (situations in which the upper beam cannot be used), there is very little information available to drivers to help them determine when to safely use upper beam headlamps.

Based on studies indicating that the upper beam headlamps are used only 25 percent of the time in situations for which they would be useful without creating glare,[255] NHTSA intends to include semi-automatic headlamp beam switching in this NCAP upgrade. As discussed previously in the lower beam headlighting performance section, the agency believes that among other crash types, pedestrian fatalities that occur under dark-not-lighted conditions may be reduced or mitigated by additional proper use of the upper beam. As shown in Table 6, semi-automatic headlamp beam switching maps to prevent or mitigate 14 of the 32 crash scenarios.

Semi-automatic headlamp beam switching was reported as optional or standard for approximately 52 percent of the ''trim lines'' (sub-models) listed in the 2016 Buying a Safer Car letter by the manufacturers. Since most semi-automatic headlamp beam switching devices activate above a minimum driving speed and react dynamically to the environment, primarily to other vehicles on the roadway, a traditional, passive and stationary goniometer-based laboratory test procedure will not suffice for confirmation of beam switching operation. Therefore, NHTSA intends to use vehicle related static measurements including confirmation of manual override capability, automatic dimming indicator, and mounting height, as well as two vehicle maneuver tests to effectively produce the semi-automatic beam switching device response to a suddenly appearing vehicle representation in a straight road scenario. The first dynamic test simulates an approaching vehicle, and the second dynamic test simulates a preceding vehicle. This test procedure will confirm that the driver has both the information necessary and the responsibility for final control of headlamp beam switching.

c. Amber Rear Turn Signal Lamps

In 2009, NHTSA studied the effect of rear turn signal color as a means to reduce the frequency of passenger vehicles crashes.[256] Specifically, the agency analyzed whether amber or red turn signals were more effective at preventing front-to-rear collisions when the rear-struck (leading) vehicle was engaged in a maneuver (*i.e.,* turning, changing lanes, merging, or parking) where turn signals were assumed to be engaged.

FMVSS No. 108 requires each vehicle to have two turn signals on the rear of the vehicle. The regulation provides manufacturers the option of installing either amber (yellow) or red rear turn signals with applicable performance requirements for each choice. To avoid imposing an unreasonable cost to society, NHTSA's lighting regulation continues to allow for the lower cost rear signal and visibility configurations that meet these requirements. Typically, the lower cost configuration includes one combination lamp on each of the rear corners of the vehicle, containing a red stop lamp, a red side marker lamp, a red turn signal lamp, a red rear reflex reflector, a red side reflex reflector, a red tail lamp, and a white backup lamp. (A separate license plate lamp is typically the most cost effective choice for vehicles rated in the NCAP information program). Such a configuration can be achieved using just two bulbs and a two color (red and white) lens.

The purpose of FMVSS No. 108 is to reduce crashes and injuries by providing adequate illumination of the roadway and by enhancing the visibility of motor vehicles on public roads so that their presence is perceived and their signals understood, both in daylight and in darkness or other conditions of reduced visibility. While the red rear turn signal lamp configuration provides a minimum acceptable level of safety, the agency believes improved safety (measured as the reduction in the number of rear-end crashes that resulted in property damage or injury) can be achieved with amber rear turn signal lamps at a cost comparable to red rear turn signal lamp configurations. This is supported by the observation of vehicle manufacturers changing the rear turn signal lamp color for a vehicle model from one year to the next, as was discussed in NHTSA Report DOT HS 811 115. The results of this NHTSA study estimated the effectiveness of amber rear turn signal lamps, as compared to red turn signal lamps, decrease the risk of two-vehicle, rear-end crashes where the lead vehicle is turning by 5.3 percent.[257] That study was designed around the concept of ''switch pairs,'' in which make-models of passenger vehicles switched rear turn signal color. The crash involvement rates were computed before and after the switch. NHTSA estimates that there are roughly 68,550 injury rear-end crashes annually in which the lead vehicle is changing direction. As shown in Table 6, rear amber turn signal lamps map to prevent or mitigate 11 of the 32 crash scenarios listed. For these reasons,

[255] Mefford, M. L., Flannagan, M. J., & Bogard, S. E. (2006). Real-World Use of High-Beam Headlamps (UMTRI–2006–11).

[256] Allen (2009). National Highway Traffic Safety Administration (DOT HS 811 115). Available at *www.nhtsa.gov/DOT/NHTSA/NRD/Multimedia/PDFs/Crash%20Avoidance/2009/811115.pdf.*

[257] Allen (2009). National Highway Traffic Safety Administration (DOT HS 811 115). Available at *www.nhtsa.gov/DOT/NHTSA/NRD/Multimedia/PDFs/Crash%20Avoidance/2009/811115.pdf.*

NHTSA intends to include amber rear turn signals in this NCAP upgrade.

A test procedure for amber turn signal lamps exists in FMVSS No. 108. For this program, NHTSA intends to use only the Tristimulus method (FMVSS No. 108 S14.4.1.4) for determining that the color of the rear turn signal lamp falls within the range of allowable amber colors. As is the case with the regulation, the color of light emitted must be within the chromaticity boundaries as follows:

y = 0.39 (red boundary)
y = 0.79 − 0.67x (white boundary)
y = x − 0.12 (green boundary)

If the motor vehicle is equipped with amber rear turn signals meeting these requirements, the agency intends to give credit in the crash avoidance rating for these vehicles.

3. Driver Awareness and Other Technologies

NHTSA believes crash avoidance warning systems have the potential to improve driver performance and reduce the incidence and severity of common crash situations. Analysis of manufacturer reported make/model features reveals that warning systems are increasingly offered in passenger vehicles, possibly the result of heightened levels of interest or demand by the consumer.

a. Lane Departure Warning (LDW)

NHTSA intends to include LDW in its crash avoidance rating for this NCAP upgrade. Currently, LDW is one of the 'Recommended Technologies' listed on the NHTSA Web site *Safercar.gov*.[258] The LDW system is a driver aid that uses vision-based sensors to detect lane markers ahead of the vehicle. The LDW system alerts the driver when the vehicle is laterally approaching a lane boundary marker, as indicated by a solid line, a dashed line, or raised reflective indicators such as Botts dots. The LDW system may produce one or more user interfaces, such as an auditory alert or haptic feedback to the driver, and is often accompanied with a visual indicator or display icon in the instrument panel to indicate which side of the vehicle is departing the lane.

Vehicle-based LDW technology utilizes either GPS technology or forward- or downward-looking optical sensors. A GPS system compares position data with a high resolution map database to determine the vehicle location within the lane. An optical sensor system uses a forward looking or downward looking optical sensor with image processing algorithms to determine where the lane edge lines are located. If the turn signal is activated, the LDW system computer software algorithm considers the driver to be purposefully crossing the lane boundary marker, and no alert is issued. LDW system performance may be adversely affected by precipitation (*e.g.,* rain, snow, fog) and roadway conditions with construction zones, unmarked intersections, and faded, worn, or missing lane markings.

LDW systems are designed to help prevent crashes resulting from a vehicle unintentionally drifting out of its travel lane. For the light passenger-vehicle crashes considered over the period 2002–2006, the Advanced Crash Avoidance Technologies (ACAT) program performed around 15,000 simulations in order to set up the underlying virtual crash population; by optimizing driving scenario weights it was possible to produce a reasonable degree of fit to the actual (GES coded) crash population. ACAT estimated that a baseline set of 180,900 crashes annually in the United States could be reduced to about 121,600 with LDW in place, so that around 59,300 crashes might be prevented.[259] AAA reported that LDW systems activate when vehicle speeds are above 40 to 45 mph (64 to 72 km/h).[260] NHTSA crash data from the period 2004 to 2013 indicate that a lane departure maneuver was a precursor to approximately 40 percent of the fatal crashes involving a single vehicle.[261] NHTSA determined that a vehicle departed its lane as characterized by the database annotation of the relation to roadway as Off Roadway, Shoulder, or Median.[262] The agency believes additional benefits from LDW technology may contribute to the possible reduction in the number of head-on collisions.[263] [264]

The IIHS similarly estimated in a 2010 report that LDW systems could prevent as many as 7,500 fatal crashes, noting that while crashes in which vehicles drift off the road have a low incidence rate, they account for a large proportion of fatal crashes.[265] In addition to the numbers NHTSA used in the 2008 NCAP upgrade notice,[266] the Highway Loss Data Institute (HLDI) estimates that LDW could apply in approximately 3 percent of police-reported crashes.[267] Three percent of the 2013 NHTSA estimated 5,687,000 police-reported crashes equates to 170,610 crashes that could potentially be reduced or mitigated with LDW crash avoidance technology.

NHTSA monitors and analyses the interaction and accumulation of vehicle alerts directed at drivers. Based on recently published technical papers describing consumer acceptance or preference of alert modality, the agency is aware that some drivers choose to disable the LDW system if they experience numerous alerts, thereby diminishing any safety benefit.[268] Additionally, the agency is concerned that multiple and overlapping alerts may create confusion for the driver regarding which safety system is being activated or engaged. Rather than require a specific alert modality for the LDW crash avoidance technology, the agency intends to re-define the LDW performance criteria such that the LDW alert may not occur when the lateral position of the vehicle is greater than +1.0 ft (+0.30 m) from the lane line edge to pass the planned NCAP test procedure. NHTSA would not consider the intensity of the haptic or the feedback delivery component (*e.g.,* steering wheel or seat haptic) in determining whether or not a vehicle received credit for LDW in NCAP.

Development of LDW technology has evolved into lane keeping support (LKS) systems that actively guide the vehicle within the lane by counter steering. In the NCAP LDW assessment, an LKS steering wheel movement would be considered an acceptable LDW haptic alert.

The agency is also concerned about false activations and missed detections resulting from tar lines reflecting sun light or covered with water and other unforeseen anomalies, which would result in an unreliable driver warning. However, the LDW test procedure is not

[258] A video file and an animation file describing LDW are available at *www.safercar.gov/staticfiles/safetytech/st_landing_ca.htm.*

[259] DOT HS 811 405, Advanced Crash Avoidance Technologies (ACAT) Program—Final Report of the Volvo-Ford-UMTRI Project: Safety Impact Methodology for Lane Departure Warning—Method Development and Estimation of Benefits, October 2010. Available at *www.nhtsa.gov/DOT/NHTSA/NVS/Crash%20Avoidance/Technical%20Publications/2010/811405.pdf.*

[260] AAA Status Report, Vol. 44, No. 10. November 18, 2009.

[261] FARS and GES.

[262] Ibid.

[263] *www.nhtsa.gov/DOT/NHTSA/NRD/Multimedia/PDFs/Public%20Paper/SAE/2006/Barickman_LaneDepartuerWarning_final.pdf.*

[264] IIHS, Status Report, Vol. 45, No. 5. May 20, 2010.

[265] Lund, A. Drivers and Driver Assistance Systems: How well do they match? 2013 Driving Assessment Conference, Lake George, NY. June 18, 2013.

[266] LDW effectiveness of 6–11 percent was estimated from data included in NHTSA Report No. DOT HS 810 854, Evaluation of a Road Departure Crash Warning System, December 2007.

[267] IIHS Status Report, Vol. 47, No. 5. Special Issue: Crash Avoidance. July 3, 2012.

[268] Ibid.

currently structured to address these concerns. Comments are requested on these issues.

LDW systems, as NHTSA currently defines them, only focus on lane departures while the vehicle is traveling along a straight line and does not account for technologies that look at curve speed warnings (CSW). CSW alerts the driver when he or she is traveling too fast for an upcoming curve. NHTSA crash data indicates off-roadway crashes occur substantially more often than crashes departing from the shoulder and median combined. NHTSA believes LDW has the potential to provide the driver with the vital sliver of time for rapid decision-making necessary to adjust and correct the vehicle direction prior to a road departure situation developing.

The agency intends to continue to use the current NCAP test procedure titled NCAP Lane Departure Warning and LKS Test Procedure for NCAP,[269] and requests comment on whether to revise certain aspects of the test procedures. The LDW test procedure provides the specifications for confirming the existence of LDW hardware. Specifically, it tests for the ability to detect lane presence, an unintended lane departure, LDW engagement, and LDW disengagement. The NCAP LDW tests are conducted at a constant test speed of 45 mph (72 km/h), in two different departure directions, left and right, using three different styles of roadway markings, continuous white lines, discontinuous yellow lines, and discontinuous raised pavement markers. Test track conditions are defined as a dry, uniform, solid-paved surface with high contrast line markings defining a single roadway lane edge. Each test series is repeated until five (5) valid tests are produced. LDW performance is evaluated by examining the proximity of the vehicle with respect to the edge of a lane line at the time of the LDW alert.

Each test trial measures whether the LDW issues an appropriate alert during the maneuver in order to determine a pass or fail. In the context of this test procedure, a lane departure is said to occur when any part of the two dimensional polygon used to represent the test vehicle breaches the inboard lane line edge. The agency requests comments on whether a valid trial is considered a failure if the distance between the inside edge of the polygon to the lane line at the time of the LDW warning is outside −1.0 to +1.0 ft (−0.30 to +0.30 m), where a negative number represents post-line position, or if no warning is issued. This is a change from the current NCAP test procedure which specifies −1.0 to +2.5 ft (−0.30 to +0.75 m). The LDW system must satisfy the pass criteria for 3 of 5 individual trials for each combination of departure direction and lane line type (60%), and pass 20 of the 30 trials overall (66%). If more than five trials are deemed valid, the pass/fail criteria must be met for three of the first five valid trials. If LDW is offered as an optional safety system, the vehicle model would receive half credit for this system. If LDW is offered as standard safety system, the vehicle model would receive full credit for the system. Comments are requested on whether the agency should only award NCAP credit to LDW systems with haptic alerts.

b. Rollover Resistance

Rollover crashes are complex events that reflect the interaction of driver, road, vehicle, and environmental factors. The term ''rollover'' describes the condition of at least a 90-degree rotation about the longitudinal axis of a vehicle,[270] regardless of whether the vehicle ends up laying on its side, roof, or even returning upright on all four wheels. Rollovers occur in a multitude of ways. The risk of rollover is greater for vehicles designed with a high center of gravity in relation to the track width. Driver behavior and road conditions are significant factors in rollover crash events. Specifically, the factors that strongly relate to rollover fatalities are: If it was a single-vehicle crash, if it was a rural crash location, if it was a high-speed roadway, if it occurred at night, if there was an off-road tripping/tipping mechanism, if it was a young driver, if the driver was male, if it was alcohol-related, if it was speed-related, if there was an unbelted occupant, and if an occupant was ejected.

i. Background

Rollover is one of the most severe crash types for light vehicles. In 2012, 112,000 rollovers occurred as the first harmful event, measuring 2 percent of the 5,615,000 police-reported crashes involving all types of motor vehicles. In 2012, single, light-vehicle rollovers accounted for 6,763 occupant deaths. This represented 20 percent of motor vehicle fatalities in 2012, 31 percent of people who died in light-vehicle crashes, and 46 percent of people who died in light-vehicle single-vehicle crashes.[271]

NHTSA describes rollovers as ''tripped'' or ''untripped.'' In a tripped rollover, the vehicle rolls over after leaving the roadway due to striking a curb, soft shoulder, guard rail or other object that ''trips'' it. Crash data suggest approximately 95 percent of rollovers in single-vehicle crashes are tripped.[272] A small percentage of rollover events are untripped, typically induced by tire and/or road interface friction. Whether or not a vehicle rolls when it encounters a tripping mechanism is highly dependent upon the ratio of two vehicle geometric properties, referred to as the Static Stability Factor (SSF). The SSF of a vehicle is calculated as one-half the track width, t, divided by the height of the center of gravity (c.g.) above the road, h; SSF = (t/2h). The inertial force that causes a vehicle to sway on its suspension (and roll over in extreme cases) in response to cornering, rapid steering reversals or striking a tripping mechanism, like a curb or the soft shoulder of the road, when the vehicle is sliding laterally, may be thought of as a force acting at the c.g. to pull the vehicle body laterally. A reduction in c.g. height increases the lateral inertial force necessary to cause rollover by reducing its leverage, and this is represented by an increase in the computed value of SSF. A wider track width also increases the lateral force necessary to cause rollover by increasing the leverage of the vehicle's weight in resisting rollover, and that advantage also increases the computed value of SSF. The factor of two in the computation (t/2h) makes SSF equal to the lateral acceleration at which rollover begins in the most simplified rollover analysis of a vehicle, which is represented by a rigid body without suspension movement or tire deflections.[273]

In 2001, the agency decided to use SSF to indicate rollover risk in a single-vehicle crash.[274] Additionally, in that notice, the agency introduced the rollover resistance rating as a means to quantify the risk of a rollover if a single-vehicle crash occurs. The agency emphasizes that this rating does not predict the likelihood of a rollover crash

[269] Available at *www.safercar.gov/Vehicle+Shoppers/5-Star+Safety+Ratings/NCAP+Test+Procedures.*

[270] ''Rating System for Rollover Resistance, An Assessment,'' Transportation Research Board Special Report 265, National Research Council.

[271] DOT HS 812 016, available at *www-nrd.nhtsa.dot.gov/Pubs/812016.pdf.*

[272] See 68 FR 59251. Docket No. NHTSA–2001–9663, Notice 3. Available at *https://federalregister.gov/a/03-25360.*

[273] For further explanation see the description and Figure 1 at *www.nhtsa.gov/cars/rules/rulings/Rollover/Chapt05.html.*

[274] See 66 FR 3388. Docket No. NHTSA–2000–8298. Available at *https://federalregister.gov/a/01-973.*

occurring only that of a rollover occurring given that a single vehicle crash occurs. In this rating system, the lowest rated vehicles (1 star) are at least 4 times more likely to rollover than the highest rated vehicles (5 stars).

The rollover rating that was included as part of NCAP was based on a regression analysis that estimated the relationship between single-vehicle rollover crashes and the vehicles' SSF using state crash data. The SSF is measured at a Vehicle Inertial Measurement Facility (VIMF).[275] NHTSA acquires vehicles and measures the height of the vehicle c.g. The VIMF consistently measures the c.g. height location of a particular vehicle using the stable pendulum configuration. The test facility must be capable of measuring the c.g. height location to within 0.5 percent of the theoretical height, typically the 3-dimensional computer generated solid model value of that vehicle. The track width is also measured on the same vehicle at this time. The risk of rollover originally calculated for the 2001 notice was based on a linear regression analysis of 220,000 single-vehicle crash events reported by 8 States (Florida, Maryland, Missouri, New Mexico, North Carolina, Ohio, Pennsylvania, and Utah).

Pursuant to the FY 2001 DOT Appropriations Act, NHTSA funded a National Academy of Science (NAS) study on vehicle rollover resistance ratings.[276] The study focused on two topics: Whether the SSF is a scientifically valid measurement that presents practical, useful information to the public, and a comparison of the SSF versus a test with rollover metrics based on dynamic driving conditions that may include rollover events. NAS published their report at the end of February 2002.[277]

The NAS study found that SSF is a scientifically valid measure of rollover resistance for which the underlying physics and real-word crash data are consistent with the conclusions that an increase in SSF reduces the likelihood of rollover. It also found that dynamic tests should complement static measures, such as SSF, rather than replace them in consumer information on rollover resistance. The NAS study also made recommendations concerning the statistical analysis of rollover risk and the representation of ratings methodology. The two primary recommendations suggested using logistic regression rather than linear regression for analysis of the relationship between rollover and SSF, and a high-resolution representation of the relationship between rollover and SSF than is provided in the current 5-star program.

On October 14, 2003, NHTSA published a final policy statement outlining its changes to the NCAP rollover resistance rating.[278] Beginning with the 2004 model year, NHTSA combined a vehicle's SSF measurement with its performance in a dynamic ''fishhook'' test maneuver presented as a single rating. The fishhook maneuver is performed on a smooth pavement and is a rapid steering input followed by an over-correction representative of a general loss-of-control situation. This action attempts to simulate steering maneuvers that a driver acting in panic might use in an effort to regain lane position after dropping two wheels off the roadway onto the shoulder.

Additionally, the predicted rollover resistance ratings were reevaluated. Consistent with the NAS recommendations, the agency changed from a linear regression to a logistic regression analysis of the data. The sample size increased to 293,000 single-vehicle crash events, producing a narrow confidence interval on the repeatability of the relationship between SSF and rollover. In contrast, the linear regression analysis performed on the rollover rate of 100 make/models in each of the six States providing data, resulted in a sample size of 600. In addition, a second risk curve was generated for vehicles that experienced a tip-up in the dynamic fishhook test.

ii. Updates to the Rollover NCAP SSF Risk Curve

Commenters to NHTSA's 2008 NCAP upgrade notice asked NHTSA to collect crash data on vehicles equipped with ESC in order to develop a new rollover risk model. In July 2008, the agency upgraded the NCAP program to combine the rollover rating with the frontal and side crash ratings, creating a single, overall vehicle rating.[279] No changes were made to the risk model at that time.[280] However, NHTSA received comments requesting that the agency collect this crash data to develop a new rollover risk model that better describes the rollover risk of all vehicles that reflects the real-world benefits of ESC.[281] To enhance its rollover program, the agency responded that they would continue to monitor the rollover rate for single-vehicle crashes involving ESC equipped vehicles.

The accumulation of crash data involving vehicles equipped with ESC has been slow. The 2003 regression analysis was based on 293,000 crash events. Up until recently, the agency had observed fewer than 10,000 crashes with ESC-equipped vehicles. Previously, NHTSA was not confident that it could accurately redraw the risk curves using such a small sample size. The agency now believes that it has accumulated enough data to see a narrower tolerance band adequate for use in a rating system.

According to the 2013 FARS, 7,500 vehicle occupants were killed in light-vehicle rollovers.[282] These 2013 rollovers accounted for 34.6 percent of the 21,667 fatalities in light vehicles that year. Of these 7,500 fatalities, 6,254 were killed in single-vehicle rollovers. NCAP provides a consumer information rating program articulating the risk of rollover, to encourage consumers to purchase vehicles with a predicted lower risk of a rollover. This information enables prospective purchasers to make choices about new vehicles based on differences in rollover risk and serve as a market incentive to manufacturers to design their vehicles with greater rollover resistance. The consumer information program also informs drivers, especially those who choose vehicles with poorer rollover resistance, that their risk of harm can be greatly reduced with seat belt use to avoid ejection. The program seeks to remind consumers that even the highest rated vehicle can roll over, but that they can reduce their chance of being killed in a rollover by about 75 percent just by wearing their seat belts.

NHTSA intends to update and recalculate the risk curve using ESC data collected from 20 States, and to transition the rollover risk rating into a new crash avoidance rating. In this new rollover scoring, NHTSA would not be changing the dynamic rollover test. The agency believes that embedding rollover into the crash avoidance rating is more appropriate since it targets rollover

[275] ''The design of a Vehicle Inertial Measurement Facility,'' Heydinger, G. J. et al, SAE Paper 950309, February, 1995.

[276] Department of Transportation and Related Agencies Appropriations, 2001. Public Law 106–346 (Oct. 23, 2000).

[277] ''Rating System for Rollover Resistance, An Assessment,'' Transportation Research Board Special Report 265, National Research Council.

[278] See 68 FR 59250. Docket No. NHTSA–2001–9663, Notice 3. Available at *https://federalregister.gov/a/03-25360*.

[279] See 73 FR 40021. Docket No. NHTSA–2006–26555. Available at *https://federalregister.gov/a/E8-15620*.

[280] See 73 FR 40032. Docket No. NHTSA–2006–26555. Available at *https://federalregister.gov/a/E8-15620*.

[281] See 72 FR 3475. Docket No. NHTSA–2006–26555. Available at *https://federalregister.gov/a/E7-1130*.

[282] Traffic Safety Facts 2012. DOT HS 812 032 available at *www-nrd.nhtsa.dot.gov/Pubs/812032.pdf*.

prevention and it also consolidates the message of reduced crash incidence. Rollover resistance would remain a significant component in the rating scheme, weighted based on its relative importance to overall vehicle safety. The details of how the crashworthiness rating is combined with the crash avoidance rating into an overall rating system are discussed in the rating section of this RFC notice.

The statistical model created in 2003 combined SSF and dynamic maneuver test information to predict rollover risk. The agency performed the Fishhook test on about 25 of the 100 make/model vehicles for which SSF was measured and substantial State crash data was available.[283] Eleven of the 25 vehicles tipped up [284] in the Fishhook maneuver that was conducted in the heavy condition with a 5-occupant load. All 11 vehicles had SSFs less than 1.20.

At that time, the agency believed it was very unlikely that passenger cars would tip-up in the maneuver test because no tip-ups were observed in the passenger cars tested at the low end of the SSF range for passenger cars. To validate that assumption, the agency tested a few passenger cars each year at the low end of the SSF range. No tip-ups have been observed in the agency tests for any vehicle type since 2007. Therefore, the agency is unable to produce an estimate or a logistic regression curve based on tip/no-tip as a variable.

The rollover statistical model was populated with new data and used logistic regression analysis to update the rollover risk curve. The agency examined 20 State datasets for single-vehicle crashes involving vehicles equipped with ESC that occurred during 2011 and 2012. Data were reported by Delaware, Florida, Iowa, Illinois, Indiana, Kansas, Kentucky, Maryland, Michigan, Missouri, Nebraska, New Jersey, New Mexico, New York, North Carolina, North Dakota, Pennsylvania, Washington, Wisconsin, and Wyoming. The dataset was comprised of 11,647 single-vehicle crashes, of which 627 resulted in rollover. For 2011, NHTSA used data reported by each of the 20 States for single-vehicle crashes involving ESC-equipped vehicles; a summation of 5,429 crashes. For 2012, NHTSA used data reported by 10 States for single-vehicle crashes involving ESC-equipped vehicles; 6,218 crashes. Table 8 shows a summary of the 2011 and 2012 State dataset used for the logistic regression analysis.

TABLE 8—SUMMARY OF 2011 AND 2012 STATE DATA USED TO GENERATE THE ROLLOVER RISK CURVE

State	2011			2012		
	Non-rollover	Rollover	Total	Non-rollover	Rollover	Total
DE	29	2	31	88	2	90
FL	624	26	650	No data	No data	No data
IA	123	12	135	237	22	259
IL	319	19	338	No data	No data	No data
IN	283	0	283	723	17	740
KS	92	2	94	266	7	273
KY	211	17	228	464	50	514
MD	133	14	147	310	31	341
MI	619	34	653	1,344	74	1,418
MO	204	22	226	No data	No data	No data
NC	407	43	450	1,028	87	1,115
ND	17	4	21	No data	No data	No data
NE	67	4	71	213	13	226
NJ	503	18	521	1,199	43	1,242
NM	55	3	58	No data	No data	No data
NY	793	4	797	No data	No data	No data
PA	383	39	422	No data	No data	No data
WA	73	8	81	No data	No data	No data
WI	203	9	212	No data	No data	No data
WY	10	1	11	No data	No data	No data
Total	5,148	281	5,429	5,872	346	6,218

The new dataset included 197 different makes/models for which the SSF had been calculated within NCAP; the SSF ranged from 1.07 to 1.53. The new dataset contained two vehicle types, passenger cars and light truck vehicles, including pickup trucks, SUVs, and vans. To accomplish the rollover analysis, it is more appropriate to use the state dataset because it provides the ability to filter for ESC-equipped vehicles rather than the NHTSA FARS database, which is not sufficiently granular. FARS contains two data elements; rollover and rollover location. The rollover data element has attributes of no rollover, tripped rollover, untripped rollover, and unknown type rollover. The rollover location data element has attributes of no rollover, on roadway, on shoulder, on median/separator, in gore, on roadside, outside of trafficway, in parking lane/zone, and unknown. The State dataset distribution compares similarly to the FARS number of vehicles involved in fatal crashes with a rollover occurrence. Table 9 summarizes the 2011 and 2012 rollover data for the number of single-vehicle crashes for ESC-equipped vehicles by vehicle type. For comparison, Table 10 summarizes the number of vehicles involved in fatal crashes with a rollover occurrence by vehicle type, as reported in FARS. In the new rollover model dataset, pickup trucks appear to be slightly underrepresented and SUVs appear to be slightly overrepresented compared with the FARS data.

[283] An Experimental Examination of 26 Light Vehicles Using Test Maneuvers That May Induce On-Road, Untripped Light Vehicle Rollover—Phase VI of NHTSA's Light Vehicle Rollover Research Program, NHTSA Technical Report, DOT HS 809 547, 2003.

[284] A ''tip-up'' occurs when the two vehicle wheels lift off the ground 2 inches during the Fishhook test.

TABLE 9—SUMMARY OF 2011 AND 2012 STATE DATA USED TO GENERATE THE ROLLOVER RISK CURVE

Vehicle type	Single-vehicle crashes (ESC-equipped vehicles)			Number of rollovers	Proportion, by vehicle type (%)
	2011	2012	Total		
Passenger Car	2,803	3,280	6,083	262	42
Pickup	636	768	1,404	92	15
SUV	1,823	1,931	3,754	259	41
Van	167	239	406	14	2
Total	5,429	6,218	11,647	627	100

Source: State Data System.

TABLE 10—VEHICLES INVOLVED IN FATAL CRASHES WITH A ROLLOVER OCCURRENCE

Vehicle type	2011		2012		2011 + 2012	
	Vehicles involved in fatal crashes	Rollover occurrence	Vehicles involved in fatal crashes	Number of rollovers	Number of rollovers	Proportion, by vehicle type (%)
Passenger Car	17,508	2,680	18,269	2,827	5,507	38
Pickup	7,790	2,050	8,001	2,117	4,167	28
SUV	6,787	2,128	7,118	2,170	4,298	29
Van	2,187	365	2,173	316	681	5
Total	34,272	7,223	35,561	7,430	14,653	100

Source: FARS.

The agency performed a logistic regression analysis of the 11,647 single-vehicle crash events. The dependent variable in this analysis is vehicle rollover, while the independent variables are SSF, light condition, driver age, driver gender, and the State indicator variable. The SAS® logistic regression program used these variables to compute the model. The SAS® statistical analysis software output tables are available in the docket for this RFC notice. Figure 4 shows a plot of the predicted rollover probability versus the SSF for the 20-State dataset. Figure 5 is a plot of the average predicted probability of rollover for each SSF in the dataset. Figures 4 and 5 demonstrate the relationship between SSF and the predicted probability of rollover, that at every level of SSF the predicted probability of rollover is less than it was estimated to be in 2003. The flatter curve for the 2011 + 2012 dataset aligns with increased vehicle SSFs, the expected effect of ESC on rollover frequency, and the reduced observation of rollover in single-vehicle crashes.

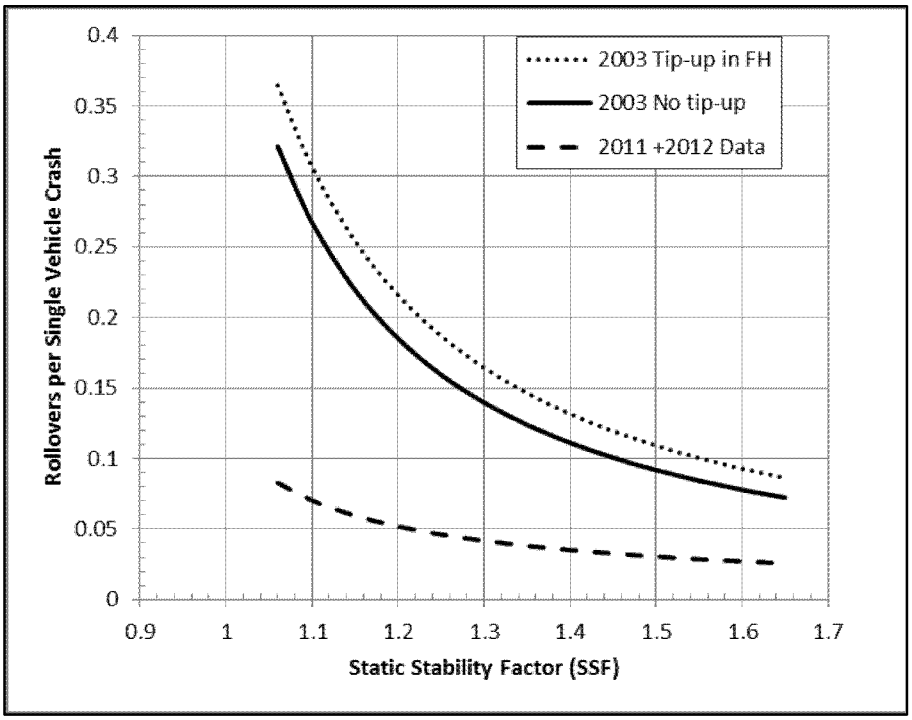

Figure 4. Current and new rollover risk curve

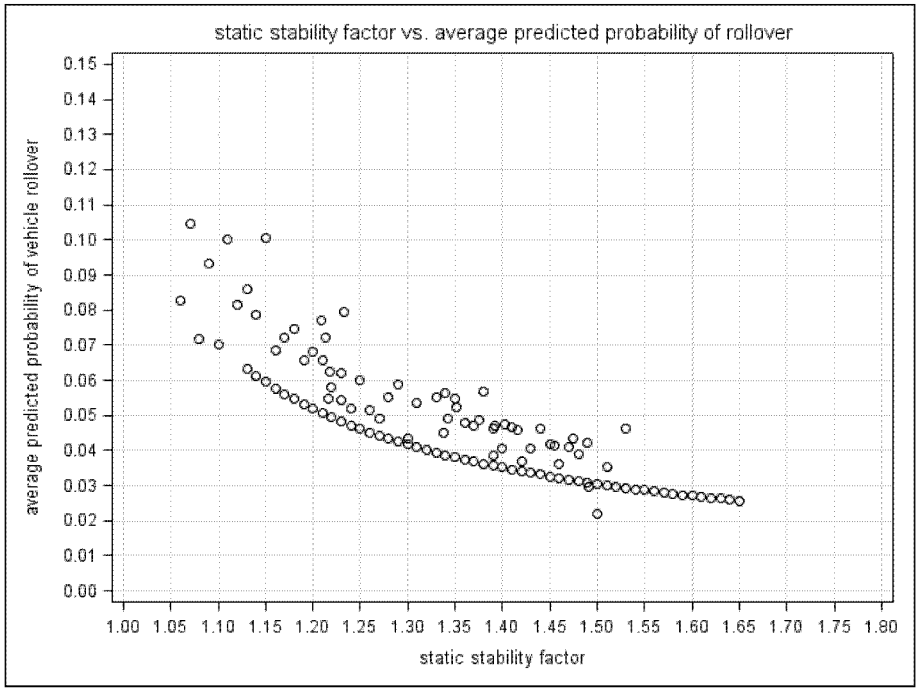

Figure 5. 2011 + 2012 average predicted rollover probabilities with the logistic regression curve

A statistical risk model is not currently possible for untripped rollover crashes because they are relatively rare events and they cannot be reliably identified in the State crash reports. The method applied earlier, using test track data, did not work, because vehicles do not routinely tip-up in testing. NHTSA intends to continue to use the current SSF-based approach to rate resistance to tripped rollovers in this NCAP upgrade. Field data collected over the past 10 years shows 95 to 97 percent of the rollovers are tripped. The agency has no data that suggests this will change.

The agency has worked for decades to reduce the number of rollovers and the resulting injuries and fatalities. Three safety standards related to rollover have

been promulgated or amended. These are: FMVSS No. 126, ''Electronic stability control,'' FMVSS No. 216, ''Roof crush resistance,'' and FMVSS No. 226, ''Ejection mitigation.'' [285] [286] [287]

Congress funded NHTSA's rollover NCAP program and directed the agency to enhance the program under section 12 of the Transportation Recall, Enhancement, Accountability and Documentation (TREAD) Act of November 2000.[288] In response to this mandate, NHTSA created a dynamic maneuver known as the Fishhook test, a double steering maneuver, conducted at speeds of up to 50 mph. The maneuver is performed with an automated steering controller, and the reverse steer of the Fishhook maneuver would be timed to coincide with the maximum roll angle to create an objective ''worst case'' for all vehicles regardless of differences in resonant roll frequency, which is the vehicle's natural roll response. This NCAP driving maneuver test represents an on-road untripped rollover crash, which represents less than 5 percent of rollover crashes.

The rollover resistance test matrix consists of a static measurement and a dynamic maneuver test. NHTSA intends to continue to use the same two tests it is using to determine the current rollover resistance NCAP rating. First, the SSF is measured statically in a laboratory, using the VIMF. The movement of the table predicts the height of the center of gravity. The track width of the vehicle is measured, and the SSF is accurately calculated. NHTSA believes that including the average SSF in the NCAP crash avoidance rating, and making the SSF available to consumers would lead to an improved fleet average SSF. Analysis of the first 10 years of NCAP make-model data shows the average SSF for SUVs improved from 1.17 to 1.21.[289] This correlates to an average reduction in the risk of rollover in a single-vehicle crash for SUVs of 11.8 percent. Similarly for passenger cars, the average SSF remained the same at 1.41. With a c.g. lower than SUVs, passenger cars have better SSFs. The second test uses the Fishhook test on a large test area, attempting to tip up the vehicle. These two tests combined provide the risk of rollover, and the current Monroney safety label rollover resistance star rating.[290] Vehicles with a higher c.g., such as an SUV, van or pickup truck typically have a higher rollover propensity than a passenger car with a lower c.g.

Initially, five levels of risk were defined based on dividing the linear regression curve into 5 bands, representing the 1- through 5-star bands, similar to the rating system for the current NCAP crashworthiness ratings. The 1-star rating corresponds to a risk of greater than 40-percent chance of rollover in a single-vehicle crash. The 5-star rating represents a less than 10-percent risk of rollover in a single-vehicle crash. Currently, the predicted rollover rate translates to an NCAP star rating such that 1 star is awarded for a rollover rate greater than 40 percent; 2 stars, greater than 30 percent and less than 40 percent; 3 stars, greater than 20 percent and less than 30 percent; 4 stars, greater than 10 percent and less than 20 percent; 5 stars, less than or equal to 10 percent. This approach achieved NHTSA's goal of presenting risk-based ratings. With a flatter rollover risk curve, defining the star bands is less obvious and more challenging. As expected, vehicles equipped with ESC have a much smaller predicted rollover probability, including vehicles with low SSFs. The range of the average predicted probability of vehicle rollover for ESC-equipped vehicles is significantly smaller than the current range. The agency intends to shift the star bands for a rollover risk curve of ESC-equipped vehicles such that 1 star would be awarded for a rollover rate greater than 0.08 percent (or SSF ≤ 1.07); stars, greater than 0.06 percent and less than 0.08 percent (or 1.07 ≤ SSF 1.15); 3 stars, greater than 0.04 percent and less than 0.06 percent (or 1.15 ≤ SSF 1.32); 4 stars, greater than 0.030 percent and less than 0.04 percent (or 1.32 ≤ SSF > 1.50); 5 stars, less than 0.030 (or SSF > 1.50). Comments are requested on these adjusted rollover star bands.

In this upgrade of NCAP crash avoidance rating, NHTSA intends to calculate the contribution of rollover resistance as a proportion of the maximum number of points awarded for rollover resistance. The credit for rollover resistance would be the number of stars earned based on the SSF divided by five, and then multiplied by the rollover resistance rating point value.

c. Blind Spot Detection (BSD)

NHTSA intends to include BSD in its crash avoidance rating for this NCAP upgrade. BSD systems use digital camera imaging technology or radar sensor technology to detect one or more vehicles in either of the adjacent lanes that may not be apparent to the driver. The system warns the driver of an approaching vehicle's presence to help facilitate safe lane changes. If the blind spot warnings are ignored, some systems include enhanced capability to intervene by applying brakes or adjusting steering to guide the vehicle back into the unobstructed lane. However, NHTSA does not plan to rate the system's capability to initiate automatic avoidance maneuvers in its NCAP rating at this time.

The BSD system processes the sensor information and presents visual, audible, and/or haptic warnings to the driver. A visual alert is usually an indicator in the side mirror glass, inside edge of the mirror housing, or on the A-pillar inside the car. If enabled, the manner in which the light is illuminated often depends on the driving situation. When another vehicle is present in an adjacent lane, and within the driver's blind spot, systems will typically illuminate the warning light continuously. When the driver activates the turn signal in the direction of the adjacent vehicle, the warning light will often flash. Some systems will also present an audible or haptic alert coincident with the flashing light.

As stated in NHTSA's ''Vehicle Safety and Fuel Economy Rulemaking and Research Priority Plan, 2011 to 2013,'' the agency examined the potential of sensors and mirrors to detect vehicles in blind spots to assist in lane changing maneuvers.[291] Using data from GES during the period 2003–2007, a target population for which blind spot detection technology would apply is estimated to be an average of 96,100 crashes annually, resulting in approximately 4,700 injuries per year and 146 fatalities per year.[292]

Anecdotal evidence from IIHS and AAA indicates that BSD systems have the potential to provide safety benefits and appear to be most effective when the equipped vehicle is passing, being passed, or preparing to make a lane change.[293] Lane change maneuvers may be planned or unplanned by drivers,

[285] 72 FR 17236. Docket No. NHTSA–2007–27662. Available at *https://federalregister.gov/a/07-1649.*

[286] 74 FR 22348. Docket No. NHTSA–2009–0093. Available at *https://federalregister.gov/a/E9-10431.*

[287] 76 FR 3212. Docket No. NHTSA–2011–0004. Available at *https://federalregister.gov/a/2011-547 corrected 76 FR 10524. Available at https://federalregister.gov/aC1-2011-547.*

[288] Public Law 106–414, November 1, 2000.

[289] NHTSA internal research analysis.

[290] The Monroney label on each new vehicle offered for sale in the United States displays a safety star rating for expected rollover performance based on the predicted rollover rate.

[291] *www.nhtsa.gov/staticfiles/rulemaking/pdf/2011–2013_Vehicle_Safety-Fuel_Economy_Rulemaking-Research_Priority_Plan.pdf.*

[292] NHTSA internal research analysis.

[293] AAA Automotive Engineering, Evaluation of Blind Spot Monitoring and Blind Spot Intervention Technologies, 2014.

and they may or may not involve use of the turn signal. Market research indicates that BSD systems consistently rate high or desirable in consumer interest surveys among various safety systems.[294] However, reduced crash rates are not easily isolated to blind spot detection technology specifically.

A May 2010 study funded by IIHS estimated that outside rearview mirror assist systems could prevent 395,000 vehicle crashes annually, potentially avoiding 20,000 injuries and 393 fatalities.[295] IIHS determined that 2011 crash data suggests 350,000 single- and two-vehicle crashes involved vehicles merging or changing lanes, which resulted in 665 fatal crashes and 59,000 injury causing crashes. The Bosch crash causation study, based on 2011 data from the NHTSA NASS database, indicated that five percent of all collisions with injuries and fatalities occurred between vehicles travelling in the same direction.[296] Bosch concluded that a significant portion of these collisions are attributable to drivers not being aware of other vehicles in their vicinity at the time of a lane change maneuver. Bosch determined that this accounted for over 77,000 collisions per year in the United States.

NHTSA research suggests the benefits of BSD systems may be smaller than the industry studies cited; however, consensus is building that drivers may benefit from BSD systems that offer the potential to reduce crash rates, and by extension, reduce injuries and fatalities in lane change related crash scenarios. NHTSA used simulation to estimate blind spot detection effectiveness for a generic sensor and found it to be between 42 percent and 65 percent, indicating prevention of 40,000 to 62,000 crashes, 2,000 to 3,000 injuries, and 61 to 95 fatalities.[297]

AAA reported that BSD systems they tested worked well, however, they cautioned that these systems are not a substitute for an engaged driver and BSD system performance can vary greatly. The agency recognizes that differences in the detection capabilities and operating conditions will likely exist among the currently available BSD systems. For instance, one manufacturer may describe their system's capabilities as demonstrating designed performance for higher speed lane change events, whereas another manufacturer may emphasize its system's augmentation of the driver's visual awareness rather than a level of effectiveness for preventing crashes. The agency anticipates a wide range of NCAP test results initially, due in part to the competing OEM perspectives as well as the establishment of performance criteria in this RFC notice.

The agency intends to use the draft BSD test procedure included in Appendix VIII to assess vehicles for this NCAP upgrade. The agency seeks comment on these procedures. Each NCAP vehicle equipped with a BSD system would be subjected to three performance tests to determine whether the system displays the warning when other vehicles are in a driver's blind zone, independent of activation of the vehicle's turn signal. Because weather and environmental conditions (*e.g.,* snow, rain, and fog) can disrupt radar signals and digital camera images, the NCAP tests would be conducted under dry conditions with the ambient temperatures above 32 °F (0 °C) and below 90 °F (32 °C). Similarly, the NCAP test conditions would minimize shadows and sunlight at sunrise and sunset in an effort to reduce false-positive alerts. The NCAP blind spot detection tests are designed to detect vehicles only, not motorcycles, pedalcycles, humans, or animals. Comments are requested on whether the NCAP test should include detection of motorcycles.

NCAP would test vehicles equipped with BSD systems under three driving scenarios; straight-lane, POV pass-by, POV and Secondary Other Vehicle (SOV) pass-by. The POV and SOV configurations would be mid-size sedans. The straight-lane scenario is very relevant to blind spot detection testing as it is the scenario that is most likely to be encountered in every day driving.[298] In the straight-lane test, both the SV and POV are driven in separate but parallel lanes with the POV driven longitudinally past the SV. In every NCAP blind spot detection test, the SV would be driven at a constant speed of 45 mph. For the straight-lane scenario, the POV would be driven at increased speeds of 5, 10 and 15 mph above the SV, as well as at the same speed to test for false-positives. This test mirrors the ISO 17387 standard test.

The second scenario, the POV pass-by scenario, is another scenario likely to be encountered in every day driving situations for vehicles travelling at highway speeds. The objective of the POV pass-by test is to determine if the system identifies a POV making a combined lane change and pass-by. The third scenario, the POV and SOV pass-by scenario, is similar to the straight-lane scenario but with the use of a third vehicle. The objective of the POV and SOV pass-by test is to determine if both the left and the right blind spot detection sensors activate simultaneously and to determine if there is any interaction when activating a turn signal on only one side of the SV while both sensors may be indicating alerts.

Each BSD system test would be performed once, unless there are any invalid test parameters or a failure then the test would be repeated. Two consecutive failures results in a BSD system fail. The left and right sides of the SV would be tested for the straight-lane and POV pass-by scenarios, with the SV turn signal activated for one trial and off for the other trial. The BSD system must detect the POV in both trials. For the POV and SOV pass-by scenario, the SV turn signals would not be activated.

4. Future Technologies

Several advanced technologies that are good candidates for this consumer information program are in various stages of development but are not ready at this time. For example, intersection movement assist (IMA), lane keeping support (LKS) systems, automatic collision notification (ACN)/advanced automatic collision notification (AACN) systems, distraction guidelines, and driver alcohol detection system for safety (DADSS). These technologies are briefly described below. NHTSA is researching these technologies and requests comment on them to aid this research.

IMA is a prototype crash avoidance technology that relies on vehicle-to-vehicle (V2V) communications. Rather than relying on sensors, radar, or cameras, IMA uses on-board dedicated short-range radio communication devices to transmit messages about a vehicle's speed, heading, brake status, and other information to other vehicles capable of receiving those messages and translating them into alerts and warnings, which the driver can then respond to in order to avoid a crash. Current IMA prototype designs may be able to warn drivers about 5 types of junction-crossing crashes which collectively represent 26 percent of all crashes occurring in the crash

[294] DOT HS 811 516, Integrated Vehicle-Based Safety Systems (IVBSS) Light Vehicle Field Operational Test Independent Evaluation, October 2011; and J.D. Power's 2015 Tech Choice Study.

[295] IIHS Status Report, Vol. 45, No. 5, May 20, 2010.

[296] Comment submitted by Robert Bosch, LLC, at *www.regulations.gov*, Docket No. NHTSA–2012–0180–0028.

[297] NHTSA internal research simulation.

[298] DOT HS 812 045, July 2014. Available at *www.nhtsa.gov/DOT/NHTSA/NVS/Crash%20Avoidance/Technical%20Publications/2014/812045_Blind-Spot-Monitoring-in-Light-Vehicles-System-Performance.pdf*

population and 23 percent of comprehensive costs.[299]

LKS systems are extensions of the current lane departure warning systems that actively guide the vehicle within the lane. LKS, also known as lane centering, gently provides corrective guidance of the vehicle, without overpowering the driver's control of the vehicle.

AACN systems notify a public safety answering point (9–1–1), either directly or through a third party, of a crash when that crash reaches a minimum severity (*e.g.,* air bag deployment). In addition to providing response personnel an earlier notification of the crash, the AACN system will transmit information regarding the location of the crash. These systems also have the capability to predict the severity of the crash and can indicate when there is a high probability of severe injury. This injury severity prediction could be used by emergency personnel to change how they respond to a crash and what type of hospital to take the patient to (*e.g.,* community hospital versus level I trauma center).

In April 2010, NHTSA released an overview of the agency's Driver Distraction Program,[300] which summarized steps that the agency intends to take to help in its long-term goal of eliminating a specific category of crashes attributable to driver distraction. Phase 1 of the NHTSA Driver Distraction Guidelines was developed for original equipment in-vehicle interfaces that allow the driver to perform secondary tasks through visual-manual means.[301] The Guidelines specify criteria and a test method for assessing whether a secondary task performed using an in-vehicle device may be acceptable in terms of the distraction performance metrics while driving. The Guidelines identify secondary tasks that interfere excessively with a driver's ability to safely control their vehicle and to categorize those tasks as ones that are not acceptable for performance by the driver while driving. Phases 2 and 3 of the Driver Distraction Guidelines are under development.

The DADSS program is a collaborative research partnership between industry and NHTSA to assess and develop alcohol-detection technologies to prevent vehicles from being operated by drivers with a blood alcohol concentration (BAC) that exceeds the legal limit as set by the State. Through the DADSS research program, the agency intends to explore the feasibility of, the potential benefits of, and the potential challenges associated with a more widespread use of in-vehicle technology to prevent alcohol-impaired driving.

E. Pedestrian Crash Avoidance Systems

New vehicle technologies are shifting the automotive safety culture from a dual focus of helping drivers avoid crashes and protecting vehicle occupants from the inevitable crashes that would occur to a triple focused approach with the addition of advanced systems that enable protecting pedestrians. Accordingly, the agency intends to increase its focus on advanced technologies that aim to protect not just vehicle occupants but pedestrians. Two crash avoidance technologies that the agency intends to include in this NCAP upgrade and rate their system performance in the pedestrian protection rating category are discussed below. NHTSA requests comment on these systems, and their readiness for inclusion in NCAP.

1. Pedestrian Automatic Emergency Braking (PAEB)

NHTSA is researching systems that will automatically brake for pedestrians, in addition to automatically braking for vehicles. PAEB would provide automatic braking for vehicles when pedestrians are in the forward path of travel and the driver has taken insufficient action to avoid an imminent crash. Table 6 shows PAEB systems map to two of the 32 crash scenarios.

PAEB, like CIB, is a vehicle crash avoidance system that uses information from forward-looking sensors to automatically apply or supplement the brakes in certain driving situations in which the system determines a pedestrian is in imminent danger of being hit by the vehicle. Many PAEB systems use the same sensors and technologies used by CIB and DBS; systems designed to help drivers avoid or mitigate the severity of rear-impact crashes with other vehicles. Like AEB technology, current PAEB systems typically use vision-cameras as the enabling sensor technology, however some systems also use a combination of cameras and radar sensors.

Unlike CIB and DBS, which address rear-impact crash scenarios, many pedestrian crashes occur when a pedestrian is crossing the street in front of the vehicle. In these pedestrian crash scenarios, there may not be enough time to provide the driver with an advanced FCW alert before the PAEB system must automatically apply the brakes.

NHTSA has conducted research in this area and intends to include PAEB in this NCAP upgrade. Pedestrians are one of the few groups of road users to experience an increase (8%) in fatalities in the United States in 2012, totaling 4,818 deaths that year.[302] Of these deaths, 3,930 fatalities occurred in frontal crashes (as stated earlier).

For AEB systems, detecting a pedestrian and preventing an impact is more complex than detecting a vehicle. Pedestrians move in all directions, change directions quickly, wear a variety of clothing materials with colors that may blend into the background, are a wide variety of sizes, and may be in an array of positions, from stationary to lying on the road. Pedestrians' appearances can appear to be more variable than cars to AEB systems. Additionally, the time to collision from when a system first detects a pedestrian might be shorter than for a car because they are moving at slow speeds, may be crossing the road in front of the car, they are much smaller than a vehicle, and they may be obscured by cars parked on the side of the road. NHTSA crash data indicates pedestrians may be anywhere on the roadway, at all times of the day and night, moving in every possible direction; sometimes crossing interstate roadways to take short-cuts and at other times simply crossing in a crosswalk.

NHTSA has completed a substantial amount of research into PAEB and has collaborated with Volpe, the National Transportation Systems Center. NHTSA is currently working on research that could eventually support the inclusion of PAEB into NCAP. This effort includes the assessment of mannequins (pose-able and/or articulated), PAEB testing apparatuses and PAEB test procedures. Volpe is currently working on a new safety benefit analysis for PAEB systems that will include new estimates for the benefits of PAEB in combination with different safety systems.

A recent analysis of the physical settings for pre-crash scenarios and vehicle-pedestrian maneuvers identified trends for these pedestrian crashes. Four scenarios were identified as the most commonly occurring situations during pedestrian crashes and are

[299] DOT HS 812 014, August 2014. Available at *www.nhtsa.gov/staticfiles/rulemaking/pdf/V2V/Readiness-of-V2V-Technology-for-Application-812014.pdf.*

[300] See *www.regulations.gov*, Docket No. NHTSA–2010–0053–0001.

[301] See 78 FR 24818, Docket No. NHTSA–2010–0053–0135. Available at *https://federalregister.gov/a/2013-09883.*

[302] National Highway Traffic Safety Administration (2015). Traffic Safety Facts—Pedestrians (DOT HS 812 124). Available at *www-nrd.nhtsa.dot.gov/Pubs/812124.pdf.*

recommended to maximize the potential safety benefits of PAEB systems.[303]

The four scenarios are (S1) vehicle going straight and pedestrian crossing the road, (S2) vehicle turning right and pedestrian crossing the road, (S3) vehicle turning left and pedestrian crossing the road, and (S4) vehicle going straight and pedestrian walking along/against traffic. These 4 scenarios addressed 67 percent of the 20 most frequent conditions involved with intersections, pedestrian location, crosswalks, and road geometry during 2005 to 2009. Of these four scenarios, S1 represents 88 percent of the occurrences of the top 20 pedestrian fatality scenarios. These 4 recommended scenarios encompassed 98 percent of all functional years lost and direct economic cost of all vehicle-pedestrian crashes in 2005 to 2009.

S1 is the most frequent pre-crash scenario and therefore has the highest values for the functional years lost and direct economic cost measures. S2 and S3 address the common turning scenarios observed in the crash data. Although S2 and S3 scenarios result in less severe injuries, NHTSA believes PAEB systems include these scenarios to function effectively. The agency requests comment on current PAEB system functionality in turning situations, as well as system capabilities in the future. Scenario S4, pedestrian walking along/against traffic, has the second highest fatality rate, and would require PAEB systems to have high-accuracy pedestrian detection at high travel speeds to address these scenarios.

The typical methods for avoiding a crash are to slow down or stop. A driver may attempt to steer the vehicle around a pedestrian in some cases. However, the pedestrian may also be attempting to flee the line of travel of the vehicle, so steering may create a more hazardous situation. Braking is the preferred action for avoiding striking a pedestrian or reducing the possible injury to the pedestrian. (Steering to avoid the pedestrian may cause another type accident or even steer toward the moving pedestrian.) Even if the collision is not avoided, the vehicle speed may be significantly reduced and the pedestrian's injuries may not be as severe as would have occurred without braking, particularly with the pedestrian crashworthiness changes to NCAP as discussed in section V.C of this RFC notice. NHTSA believes the best automatic system characteristic would be to automatically apply the brakes in the event of an imminent collision.

For scenario S1, NHTSA has determined that PAEB systems may be effective at reducing 83 percent of the crashes involving walking pedestrians that received a MAIS 3+ injury/fatality. NHTSA data from 2009 suggests these safety benefits would be 317 severe injuries or fatalities avoided annually.[304]

To date, the agency is still refining the pedestrian test scenarios. With the help of the industry/government collaborative effort known as Crash Avoidance Metrics Partnership (CAMP), NHTSA has made significant progress in developing the PAEB performance tests. The potential test procedure includes a pedestrian in a straight roadway and the subject vehicle moving in a straight path. The potential test scenarios captured by this procedure include walking across the road (S1), walking along the roadway (S4), two different vehicle speeds 10 and 25 mph (16 and 40 km/h), three different mannequin speeds (stationary, walking, running), two different sized mannequins (child, adult), and false activations (*e.g.,* curves, hillcrests, light conditions, erratic pedestrian movement).

NHTSA has used light-weight adult and child pedestrian dummies. These dummies are both somewhat realistic looking and have radar reflective properties.

In developing the test procedure, three general apparatus concepts were identified for transporting the pedestrian mannequins in a test run. These included two overhead, gantry-style designs and one moving sled arrangement. Several adaptations of each concept were also considered. The overhead suspended truss was selected by CAMP to conduct baseline and validation research. NHTSA is using a ground-based moving sled arrangement for current PAEB research.

It should be noted that testing in the PAEB program assumes considerable speed reduction (crash mitigation) or in some cases complete avoidance maneuver by the production vehicle to accomplish pedestrian protection. Some PAEB systems have shown avoidance capabilities at the vehicle test speeds that are being considered. The intent of the performance tests is to establish realistic scenarios and to measure vehicle PAEB performance.

[303] Barickman and Albrecht, SAE Government Industry Meeting, 2015, ''Pedestrian Crash Avoidance Research Program Update.''

[304] DOT HS 811 998, ''Target Crashes and Safety Benefits Estimation Methodology for Pedestrian Crash Avoidance/Mitigation Systems,'' April 2014.

2. Rear Automatic Braking

NHTSA has funded studies of motor vehicle advanced technologies that will help drivers avoid pedestrian impacts. Recently, the agency established a FMVSS requiring rearview video systems in passenger vehicles, providing a view of a 10-foot wide by 20-foot long area behind the vehicle. The agency intends to include rear automatic braking systems in this NCAP upgrade, which is separate from and in addition to the requirements specified in FMVSS No. 111, ''Rear visibility,'' for light vehicles manufactured on or after May 1, 2018, to provide the driver with a rearview image.

NHTSA expects rear visibility systems to have a substantial impact on the over 200 pedestrians killed each year resulting from backover crashes. Rear visibility systems meeting the minimum performance standards of FMVSS No. 111 rely on the driver to view the rearview image and then act appropriately to avoid a pedestrian crash. The agency expects that 58 to 69 lives will be saved by rear visibility systems each year when fully implemented. However, rear visibility systems will not completely solve the backover crash problem; 141 to 152 lives are expected to be lost each year in backover crashes, even with rear visibility systems on all new light vehicles. As shown in Table 6, rear automatic braking could potentially prevent or mitigate a crash in 7 of the 32 crash scenarios listed.

For NCAP purposes, a rear automatic braking system is defined as a system that applies the vehicle's brakes, independent of driver action, in response to the presence of an object in a specified area behind the vehicle during backing. For NCAP, NHTSA's test procedure would assess the rear automatic braking systems' ability to detect pedestrians and brake the vehicle to a stop to avoid a crash. While avoiding slow moving or stationary objects such as poles and parked vehicles may provide economic benefits for drivers, NHTSA is focusing on reducing fatalities and injuries, and therefore on system performance to avoid crashes with pedestrians.

Information pertaining to the ability of a rear automatic braking system to aid in avoiding pedestrian crashes may be difficult for an individual consumer to obtain in a uniform way that can be easily understood and compared across manufacturers. The NCAP program would serve as a trusted source for consumers for pedestrian crash avoidance information.

Accompanying this RFC notice, the agency is publishing a draft test procedure that evaluates rear automatic braking systems. Including this assessment in NCAP would encourage manufacturers to add technology that would automatically detect and avoid rearward pedestrian crashes. NHTSA intends to use the test procedure identified in Appendix VIII and contained in the docket to assess the ability of a rear automatic braking system to avoid striking pedestrians behind the vehicle by using a static surrogate child pedestrian ATD. The posable mannequin is tuned for RADAR, infrared, and optical features. NHTSA expects the technology (explained in more detail below), now focused on large objects approaching a backing vehicle, will evolve to the point where it will effectively and reliably detect pedestrians, warn drivers and, if appropriate, apply the brakes automatically to stop the vehicle.

For the 2014 model year, NHTSA is aware of only two vehicle makes and models that offered rearward collision avoidance systems, both of which were described as not able to detect every object. This advanced safety feature was available on both vehicles as options. NHTSA purchased two 2014 model year vehicles equipped with rear automatic braking systems for testing. One manufacturer's literature explained that their ''Automatic Front and Rear Braking'' will apply emergency braking automatically in certain driveway, parking lot and heavy traffic conditions if it detects a vehicle in front of or behind the subject vehicle. Additionally, it was noted that under many conditions these systems will not detect children, pedestrians, bicyclists, or animals. Similarly, the second vehicle owner's manual explained that the radar sensors of their ''Back-up Collision Intervention'' system detect approaching (moving) vehicles. Neither owner's manual characterized the rearward detection and collision avoidance system as being able to detect pedestrians. Both systems were described as automatically applying vehicle brakes in certain circumstances.

The sensor technologies used in automatic braking systems are known to have the ability to detect pedestrians, to some extent. Using the two 2014 makes and models with rearward collision avoidance systems, NHTSA conducted its own experimental testing to determine how well the systems respond to pedestrians and other test objects (*e.g.,* cone, pole, surrogate vehicle, ride-on toy). In the test, the subject vehicle was allowed to coast backward while maintaining centerline alignment with a longitudinal line marked on the ground until the rear automatic braking feature intervened by automatically engaging the service brakes bringing the vehicle to a stop or until the vehicle contacted the test object. The initial test results indicate that detection performance is not consistent across all test objects. When the NHTSA test report is published, a copy will be entered into the docket. The results of this experimental testing served as the basis for the draft test procedure that is included in Appendix VIII and on which the agency seeks comment.

Similar to the forward AEB systems, the metrics for rear automatic braking system tests would be a pass-fail criterion. If all the tests are passed, the vehicle would get credit for having the technology. This would be calculated in the pedestrian rating calculation. If a rear automatic braking technology is offered as an optional safety technology, the vehicle model would receive half credit for this technology. If a rear automatic braking technology is a standard safety technology, the vehicle model would receive full credit for this technology.

VI. New Rating System

A. Overall Rating

NHTSA is planning to change the way NCAP rates vehicles for safety. An effective rating system: (a) Provides consumers with easy-to-understand information about vehicle safety, (b) provides meaningful comparative information about the safety of vehicles, and (c) provides incentive for the design of safer vehicles. As such, NHTSA believes an effective rating program will discriminate truly good performance in safety and spur continuous vehicle safety improvement.

The current NCAP rating system comprises an overall rating score (also known as Vehicle Safety Score or Overall Vehicle Score), which is computed as the field-weighted scores from the full frontal crash, side crash (side MDB and side pole), and rollover resistance tests. It is based on a 5-star rating scale that ranges from 1 to 5 stars, with 5 stars being the highest. The overall rating score does not include assessment of existing advanced crash avoidance technologies recommended under the NCAP program, which are listed as Recommended Technologies on the agency's Safercar.gov Web site.

This NCAP upgrade described in this RFC notice would provide an overall star rating and individual star ratings for crashworthiness, crash avoidance, and pedestrian protection categories. Past market research conducted by NHTSA reveal that consumers prefer a simplified rating and process. Therefore, NHTSA intends to ensure the revised star rating and process is simplified and easy to understand.

While star ratings would be maintained as a range from 1 to 5 stars, the agency is also planning to use half stars to allow better discrimination of safety so that consumers can make informed purchasing decisions. The planned approaches for determining the crashworthiness, crash avoidance, and pedestrian star ratings are described in the following sections.

NHTSA request comment on the general decision to only provide category rather than test-based star ratings, as well as comment on how to best combine the individual categories in an easy to understand manner. The agency is also interested in any other possible approaches not mentioned in this RFC notice.

B. Crashworthiness Rating

NHTSA intends to provide a single-star rating for the crashworthiness performance of new vehicles by evaluating a vehicle's performance in four crash test modes (full frontal rigid barrier, frontal oblique, side MDB, and side pole). Depending upon the test, one to three crash test dummies will be used for assessment. Each dummy has numerous body regions for which criteria to assess the risk of injury will be evaluated.

The following describes how NHTSA could use the results from various crash test modes in calculating a vehicle's crashworthiness star rating. The agency is seeking comment on the following approaches and other alternatives.

Assessing Injury Criteria

The agency is considering the following approaches for assessing injury criteria in the dummies used in the crash tests.

- Based on calculated injury risk—Use injury risk functions for each body region that has an injury risk function available and that is applicable to the dummy involved.
- Based on a fixed range of performance criteria—A set of performance criteria can be implemented using injury risk curves, existing Federal regulations, other agency data, or a combination thereof. One possible implementation of this approach could be similar to the Euro NCAP approach, where lower and upper performance targets would be set for each body region assessed, and a point system would be used for the given occupant. Full points would be awarded

for achieving the upper target or better, a linearized number of points would be awarded for performance between the lower and upper targets, and no points would be awarded for the given occupant if the lower performance target is not met.

• Based on current fleet performance—Similar to current NCAP, injury assessment could be determined based on relative fleet performance in NCAP tests. One possible implementation of this approach would result in the best-performing vehicle receiving the highest score and the worst-performing vehicle receiving the lowest score.

Combining Each Injury Criteria for an Occupant Seating Location Score

For combining the injury criteria from several body regions into a combined injury risk or score for each occupant seating location, the following approaches are under consideration:

• Equal weighting for all body regions—Weight all body regions equally and calculate a joint probability of injury (or joint score) for a given occupant based on all available injury criteria or body regions. This essentially reflects the approach currently used in NCAP.

• Weighting using field data—Injury criteria for the body regions could be weighted based on the incidence, cost, mortality, or severity of injury, and then combined into a joint probability (or joint score) for that occupant seating position.

• Partial weighting using field data, subject to constraints—Injury criteria for body regions that have a low incidence of injury for a given occupant seating location would alternatively be evaluated using a constraint method with an established threshold. For example, for a given occupant, body regions of higher significance could be assessed through a joint probability of injury approach, and body regions of less significance could be assessed using a constraint method whereby a minimum performance must be met. A possible implementation of the constraint method could be, for example, if the measured risk of injury exceeds a predetermined threshold, the score for the given occupant seating location would not be fully awarded. Instead, it would be capped at a certain level.

Combining Each Occupant Seating Location Score Into a Test Mode Score and Into a Total Crashworthiness Rating

There are also several approaches to combining the score of each occupant seating location into a single combined score for each test mode or for the overall crashworthiness rating:

• Equal weighting for all occupants—Each dummy seating location would be weighted equally and the injury risks would be combined into a single test mode score. This approach could be carried out using a combined probability, a sum, or an average. This is essentially the approach used currently for the frontal NCAP assessment.

• Weighting using field data—The injury risk for each dummy location would be weighted based on the incidence, risk, occupancy, or other field-relevant data and then combined into a single test mode score.

• Partial weighting using field data, subject to constraints—Partial weighting using field data can be used for seating positions in a given crash mode that exceed a threshold criterion, such as percent occupancy or percent of overall fatalities. For those below a threshold value, a constraint system can be implemented whereby a minimum performance must be met before a given score is awarded in either the test mode or the total crashworthiness rating.

NHTSA seeks comment on these various approaches as well as other potential approaches not mentioned in this RFC notice.

C. Crash Avoidance Rating

As mentioned above, the agency intends to establish a new rating system for crash avoidance and advanced technology systems. To continue the accepted method of consumer information, a 5-star safety rating is preferred. Upon adoption of the planned rating, NHTSA intends to discontinue its practice of recommending advanced technologies on S*afercar.gov.* The agency may begin listing technologies that are available but that have not achieved the NCAP level of performance in the Safety Features box on the second page of each vehicle rating on *Safercar.gov.* All recent vehicle models that have a rearview video system are listed in this box, even if they do not achieve all of the performance in the NCAP test procedure. Currently, the agency intends to include 11 crash avoidance and advanced technology systems as part of the new rating system for the NCAP upgrade; 9 technologies in the crash avoidance rating described in this section and 2 crash avoidance technologies in the pedestrian rating that is described in the next section. NHTSA selected these systems for inclusion in NCAP based on potential safety benefits.

The rating methodology for the crash avoidance and advanced technology systems under consideration would be based on a point system. For each technology, a point value for full or half credit would be determined. The maximum point value of all technologies earning full credit would equal 100 points. The point value of each individual technology, (designated A or B, etc. below) is based on the proportion of their individual benefit potential divided by the sum of all the benefits estimated for all of the technologies in the crash avoidance program projected onto a 100-point scale.

$$\frac{Benefit\ A}{Sum\ (Benefit\ A, Benefit\ B, etc)}\ X\ 100\ = Point\ value\ A \qquad \text{(Equation 1)}$$

Each technology then has its own total credit value toward the possible 100-point maximum score system. For technologies with pass or fail criterion, the credit may be awarded as total credit for pass performance or as no credit for fail performance. For example, a vehicle having a forward collision warning system might earn a 12-point credit toward the 100-point maximum score if it is standard equipment on that vehicle with acceptable performance.

Credit may be adjusted to a lesser value for several reasons. One reason would be in order to rate the performance of a particular technology into stratified levels of performance. For example, rating CIB by the amount of speed reduction can be divided into 5 levels of performance. A second example is the rollover rating. The rollover rating, currently a 5-star system, is based on the vehicle's static stability factor (SSF) and whether it tipped up in a dynamic test. The credit for rollover would be adjusted by 1/5th for each star earned with SSF. Equation 2 below is an example of how an adjusted credit would be calculated for rollover.

$$(Point\ value\ for\ rollover) * \left(\#\ of Stars * \frac{1}{5}\right) = Adjusted\ credit \qquad \text{(Equation 2)}$$

A second reason for adjusting the credit would be if the system is offered as optional equipment. Differentiation is introduced such that the vehicle would receive half credit for a technology that was offered as optional equipment with a take rate (*i.e.,* options exercised by the consumer) above a pre-determined level and full credit for a technology that was standard equipment.

The overall score is than the sum of all the credits for all technologies.

$$\sum(Credit\ A, Credit\ B, etc.) = Overall\ Rating\ out\ of\ 100 \qquad \text{(Equation 3)}$$

The crash avoidance star rating scale may be a simple conversion of 1 star for every 20 credit points accumulated. A possible star-rating scale would be as follows in Table 11.

TABLE 11—CRASH AVOIDANCE RATING SCALE

CA point total	CA rating
1–19	1 star.
20–39	2 star.
40–59	3 star.
60–79	4 star.
80–100	5 star.

As listed and shown in the table below, the crash avoidance systems would be separated into three categories with maximum points awarded to each technology:

- Category 1: Forward warning and AEB would include FCW (12 points), CIB (12 points), and DBS (11 points)—cumulative 35 points total.
- Category 2: Visibility would include lower beam headlighting (15 points), semi-automatic headlamp beam switching (9 points), and amber rear turn signal lamps (6 points)—cumulative 30 points total.
- Category 3: Driver Awareness/Other would include LDW (7 points), blind spot detection (8 points), and rollover resistance (20 points)—cumulative 35 points total.

TABLE 12—CA TECHNOLOGY POINT VALUES

Crash avoidance technology	Point value
Forward Warning and AEB	**35 total.**
FCW	12.
CIB	12.
DBS	11.
Visibility	**30 total.**
Lower beam headlighting	15.
Semi-automatic headlamp beam switching.	9.
Amber rear turn signal lamps	6.
Driver Awareness/Other	**35 total.**
LDW	7.
Blind Spot Detection	8.
Rollover Resistance	20.

D. Pedestrian Protection Rating

NHTSA intends to rate vehicles for pedestrian protection using results from the four crashworthiness pedestrian tests (two headform, one upper legform, and one lower legform) and system performance tests of two advanced crash avoidance technologies that have the potential to avoid or mitigate crashes that involve a pedestrian and improve pedestrian safety—PAEB and rear automatic braking. From a consumer perspective, the agency believes that it is beneficial to aggregate the scores of PAEB and rear automatic braking systems with a vehicle's crashworthiness pedestrian protection scores so that a separate, single pedestrian protection score could be clearly distinguished from the other two ratings (crashworthiness and crash avoidance) for consumers. Consumers could then make informed purchasing decisions for their families about whether to purchase vehicles that are equipped with these pedestrian safety related features and technologies and rated in one category—pedestrian protection. Alternatively, the agency acknowledges that including these forward and rear automatic braking technologies in the crash avoidance rating calculation (instead of in the pedestrian protection rating calculation) may be an effective means to encourage market penetration of these crash avoidance technologies. NHTSA seeks comment on the best approach to assess and rate a vehicle's various pedestrian protection performance features.

For the crashworthiness pedestrian score, NHTSA intends to use the same (or similar) scoring system and apportioning that Euro NCAP uses in accordance with the Assessment Protocol, ''Pedestrian Protection, Part 1—Pedestrian Impact Assessment, Version 8.1, June 2015.'' In short, the crashworthiness pedestrian safety scoring would be apportioned as follows:

- ⅔ of the score would be based on headform tests.
- ⅙ of the score would be based on upper legform tests.
- ⅙ of the score would be based on lower legform tests.

For the pedestrian crash avoidance score, the vehicle would receive credit for being equipped with the technology, provided that vehicle satisfies the performance requirements for each test scenario. If a PAEB or rear automatic braking system is offered as an optional safety technology, the vehicle model would receive half credit for the technology. If a PAEB or rear automatic braking system is offered as a standard safety technology, the vehicle model would receive full credit for the technology.

The agency requests comments on the approach to aggregate the four crashworthiness pedestrian test results with the two pedestrian crash avoidance test results into one pedestrian protection rating.

VII. Communications Efforts in Support of NCAP Enhancements

As NHTSA implements this NCAP upgrade planned for 2018 beginning with MY 2019 vehicles, communicating these changes to the public will be critical to ensure that consumers understand how the program will help them make informed choices about vehicle safety and incentivize improvements in vehicle safety. NHTSA's efforts may include executing a comprehensive communications plan utilizing outreach strategies to inform and equip new vehicle shoppers with the latest vehicle safety information. The agency plans to publish a final decision notice in 2016, which will describe this NCAP upgrade in detail. The agency plans to begin its outreach efforts in the three years following that,

prior to the planned program implementation in 2018. NHTSA is considering the following activities to effectively promote awareness of the changes in this NCAP upgrade and its new 5-Star Safety Ratings system:

- *Consumer Information*—As the vehicle research and purchasing process has largely shifted to online, so has the need to better convey vehicle safety information on *Safercar.gov.* Approaches to improving consumer information may include:
  - Enhancing topical areas under the 5-Star Safety Ratings and Safety Technologies sections on *Safercar.gov*—These areas may include providing more consumer-friendly information on NCAP's safety testing and criteria, results from individual crash test modes, as well as emerging vehicle safety technologies that are of significant interest to consumers.
  - Restructuring NCAP-related content on *Safercar.gov* to improve organization—Because the *Safercar.gov* site and its topics have grown, there is a need to reevaluate the landing page and reorganize some of the content so that consumers can more easily access safety information.
  - Improving the search functionality on the Web site—With the large amount of information in the NCAP database, more flexible search functionality is needed. NHTSA will look into improving the search function through the introduction of both advanced search programming and the introduction of new search features. Common search feature requests to the agency include providing consumers with the option to search by crash avoidance technology or by star rating across vehicle class.
  - Creating engaging and interactive digital materials—In this digital age, consumers are more likely to watch video than read text-heavy content when learning about vehicle safety. NHTSA will explore creating digital materials that utilize videos (live-action, animated, or interactive) to educate consumers about the NCAP program.
  - Weaving simple, high-level messages into digital materials—Communicating this NCAP upgrade using clear, concise and consumer-friendly language is vital. Also, digital material that will be available on *Safercar.gov* will include consistent messaging.
- *Dealer Toolkit*—NHTSA intends to create tailored material describing important points about this NCAP upgrade to distribute to vehicle dealers. This material would help get dealers up-to-speed about the program enhancements so that they could communicate the changes to prospective vehicle purchasers. The material could include technical and tailored language required to effectively describe the new enhancements, including but not limited to the following:
  - Need for the new program;
  - Explanation of the key changes from the existing to the new program;
  - Benefits of the new program; and
  - List of the most anticipated questions from consumers.

  In addition to material that educates dealers and dealer salesforces, NHTSA may also create material for distribution at the point of sale. For example, fact sheets or a 1-pager with frequently asked questions about NHTSA's new 5-Star Safety Ratings program could be on-hand so that prospective vehicle purchasers can learn how the program enhancements affect them and why it is important to make safety a priority in their vehicle purchases. This point-of-sale material could also include consistent branding and direct consumers to *Safercar.gov* where they can learn more about the program enhancements.
- *Partner Outreach*—Utilizing existing relationships and developing new partnerships with the online automotive community to better educate consumers and help distribute the messages to a broader audience would ensure that consumers are informed about the new program improvements. These third-party relationships would expand the agency's reach. NHTSA could work with existing third-party organizations and recruit additional partners to promote content on *Safercar.gov.* The agency believes that working with its partners will play a key role in the success of the launch of this NCAP upgrade. The agency is considering the following actions:
  - Develop collateral materials with partners to distribute through relevant channels;
  - Provide key messages and talking points about the new program enhancements to partners to distribute through their internal and external communications channels; and
  - Secure speaking opportunities with NHTSA officials at partner events to discuss the new program enhancements.
- *Social Media*—Messaging on NHTSA's social media platforms will also be important to inform consumers about the new program enhancements, by maintaining a steady drumbeat of messages. NHTSA would monitor its social media channels and respond to online ''conversations'' in real-time, which would help increase engagement surrounding the new program improvements. NHTSA would also identify opportunities to re-tweet and re-post online influencers who interact with NHTSA's content. This would give users recognition for sharing NHTSA's content and also vary posts on the social media channel.
- *Press Event*—A series of media announcements from the U.S. Department of Transportation and NHTSA's officials about the new program would be made over the next few years to inform the public about this NCAP upgrade.

Once the agency considers the public comments and makes a final decision about what changes will be made to NCAP, it will address as appropriate, any applicable vehicle labeling issues relating to the Monroney label, commonly known as the vehicle window sticker.

VIII. Conclusion

Since its inception, NCAP has stimulated the development of safer vehicles. The agency recognizes the need to continually encourage improvements in the safety of vehicles by expanding the areas vehicle manufacturers need to consider in designing their vehicles and by making more challenging the tests and criteria on which NCAP star ratings are based. Only by doing this will NHTSA, and thereby consumers, be able to continue to identify vehicles with truly exceptional safety features and performance.

This RFC notice identifies a number of new areas the agency intends to add to NCAP as well as new assessment tools and tests. These include (1) adding a new frontal oblique crash test; (2) using a THOR 50th percentile male crash test dummy in the frontal oblique and full frontal tests; (3) replacing one of the dummies currently used in side crash testing with the WorldSID 50th percentile male dummy; (4) updating the rollover static stability factor risk curve to account for newer ESC-equipped vehicles that are less likely to be involved in rollover crashes; (5) adding crashworthiness pedestrian testing to measure the extent to which vehicles are designed to minimize injuries and fatalities to pedestrians struck by vehicles; (6) adding multiple new vehicle safety technologies to a group of advanced technologies already in NCAP; and (7) creating a new rating system that will account for all elements of NCAP—crashworthiness, crash avoidance, and pedestrian protection. Each of these areas has been discussed in detail above. As indicated earlier, the agency will be conducting additional technical work in some of these areas, the results of which will be made

publicly available no later than the agency's release of the final decision notice.

The agency intends to issue a final decision notice regarding the new tools and approaches detailed in this RFC notice in 2016. NHTSA plans to implement these enhancements in NCAP in 2018, beginning with MY 2019 and later vehicles manufactured on or after January 1, 2018. Interested parties are strongly encouraged to submit thorough and detailed comments relating to each of the areas discussed in this RFC notice. Comments submitted will help to inform the agency's decisions in each of these areas as it continues to advance its NCAP program to encourage continuous safety improvements of new vehicles in the United States.

IX. Public Participation

How do I prepare and submit comments?

Your comments must be written and in English. To ensure that your comments are filed correctly in the docket, please include the docket number of this document in your comments.

Your comments must not be more than 15 pages long (49 CFR 553.21). NHTSA established this limit to encourage you to write your primary comments in a concise fashion. However, you may attach necessary additional documents to your comments. There is no limit on the length of the attachments.

Please submit one copy (two copies if submitting by mail or hand delivery) of your comments, including the attachments, to the docket following the instructions given above under **ADDRESSES**. Please note, if you are submitting comments electronically as a PDF (Adobe) file, NHTSA asks that the documents submitted be scanned using an Optical Character Recognition (OCR) process, thus allowing the agency to search and copy certain portions of your submissions.

How do I submit confidential business information?

If you wish to submit any information under a claim of confidentiality, you should submit three copies of your complete submission, including the information you claim to be confidential business information, to the Office of the Chief Counsel, NHTSA, at the address given above under **FOR FURTHER INFORMATION CONTACT**. In addition, you may submit a copy (two copies if submitting by mail or hand delivery), from which you have deleted the claimed confidential business information, to the docket by one of the methods given above under **ADDRESSES**. When you send a comment containing information claimed to be confidential business information, you should include a cover letter setting forth the information specified in NHTSA's confidential business information regulation (49 CFR Part 512).

Will the agency consider late comments?

NHTSA will consider all comments received before the close of business on the comment closing date indicated above under **DATES**. To the extent possible, the agency will also consider comments received after that date.

Please note that even after the comment closing date, we will continue to file relevant information in the Docket as it becomes available. Accordingly, we recommend that interested people periodically check the Docket for new material.

You may read the comments received at the address given above under **ADDRESSES**. The hours of the docket are indicated above in the same location. You may also see the comments on the Internet, identified by the docket number at the heading of this notice, at *www.regulations.gov*.

Anyone is able to search the electronic form of all comments received into any of our dockets by the name of the individual submitting the comment (or signing the comment, if submitted on behalf of an association, business, labor union, etc.). You may review DOT's complete Privacy Act Statement in the **Federal Register** published on April 11, 2000 (65 FR 19477–78) or you may visit *www.dot.gov/privacy.html*.

X. Appendices

Appendix I: Frontal Crash Target Population

Recent NHTSA efforts have resulted in a more refined approach to analyzing frontal crash field data, from data sources such as the National Automotive Sampling System Crashworthiness Data System (NASS-CDS) and Crash Injury Research and Engineering Network (CIREN), than has been used in the past. The refined approach was developed to categorize frontal crashes more in terms of expected occupant kinematics during the crash event, as occupant motion and restraint engagement are more relevant to injury causation than the specifics of the vehicle damage (*e.g.*, frontal plane crush). The new approach does not facilitate direct comparison with prior frontal crash target populations. The refined method is still based on vehicle damage characteristics such as Collision Deformation Classification (CDC) and vehicle crush measures,[305] but separates crashes into groups that are intended to be more indicative of occupant kinematic response. One feature of the new approach is the inclusion of some crashes that would previously have been considered side impact crashes due to the vehicle damage being on the side plane (based on the CDC area of deformation).[306] Those side impacts result in frontal-like occupant kinematics, and are more appropriately grouped into a frontal crash target population rather than a side impact target population when assessing frontal crash injury causation.

NASS-CDS data from case years 2000 through 2013 were chosen to establish the frontal crash target population. Passenger vehicles involved in tow-away non-rollover crashes were eligible for inclusion. The CDC of the most significant event was used to initially select frontal and frontal-oriented side impact crashes for analysis according to the following criteria: [307]

General area of damage (GAD1)	Specific horizontal location (SHL1)	Direction of force (DOF1)
F	Any	Any.
L	F, Y	11,12,1 o'clock.
R	F, Y	11,12,1 o'clock.

Elements of the CDC coding are described in SAE J224. The choice of which combinations of codes is determined by NHTSA. See DOT HS 811 522.

[305] SAE J224 March 1980 Collision Deformation Classification.

[306] National Highway Traffic Safety Administration, ''NASS Analysis in Support of NHTSA's Frontal Small Overlap Program,'' DOT HS 811 522, August 2011.

[307] See SAE J224, March 1980, Collision Deformation Classification for a guide to the acronyms used here.

The Frontal Impact Taxonomy (FIT) uses the CDC, crush profile, principal direction of force (PDOF), and vehicle class-specific geometry indicators [308] to identify and classify frontal crash types within the broad set of crashes described above based on the amount of overlap and the angle (obliquity) of the impact. This approach was developed to more comprehensively identify small overlap crashes, which had been identified as a potential area for frontal impact crashworthiness enhancements.[309] Occupant inclusion requirements for the frontal target population consisted of belt-restrained occupants, who were not completely ejected, and who sustained an AIS 2+ injury or were killed. The seat positions and ages considered are summarized below:

Seat row	Position	Age [years]
1	Outboard only (11,13).	13+
2	All (21, 22, 23)	8+

The first step in applying the FIT is to identify small overlap crashes based on the CDC alone for cases with damage described by GAD1 of F and SHL1 of L or R.[310] That subset of small overlap crashes is then augmented by the addition of crashes meeting a small overlap definition based on class-based vehicle geometry and crush. This crush-based assessment looks at the damage relative to the longitudinal frame rails for cases where the CDC may not indicate a small overlap impact based on the damage type coded by SHL1 (*e.g.,* when SHL1 is either Y (left+center) or Z (right+center)). The frontal-oriented side plane impacts with GAD1 of L or R are examined from a crush perspective relative to vehicle class-specific geometry. In other words, when certain damage, and impact vector (PDOF) characteristics are met, the crash will be considered a small overlap frontal crash by the FIT. Frontal crashes not identified as small overlap at this stage are then classified based on the crush profile relative to the frame rail locations into left partial overlap, right partial overlap, or narrow center impacts if crush measures are defined. Remaining frontal crashes are considered full overlap.

After crashes have been classified based on the extent of overlap, they are categorized as either co-linear or oblique based on the coded PDOF value. All small overlap crashes, even with 0° PDOF angles, are considered oblique to the side of crush based on findings from laboratory research.[311] All full overlap and partial overlap crashes with non-zero PDOF angles are considered oblique. Full overlap crashes with 0° PDOF angle are considered co-linear. Partial overlap crashes with 0° PDOF angle are divided between oblique and co-linear based on findings of the study reported by Rudd et al. (2011). In that study, approximately 20 percent of the 0° partial offset cases resulted in oblique occupant kinematics (to the side of crush).[312] Therefore, NASS–CDS case weights are apportioned 20 percent to oblique and 80 percent to co-linear for partial overlap 0° crashes. Note that the narrow center-impact partial overlap crashes are considered a special category, and will not be further broken into oblique or co-linear groups as they are not specifically addressed by any of the planned tests. For the purposes of this frontal target population, the crashes are further restricted to those with PDOF angles between 330° to 0° and 0° to 30°. There are no restrictions on the impacted object or on the model year of the case vehicle.[313]

The data are presented on an occupant basis, so the counts do not correspond to the number of vehicles meeting a particular crash description. There may be more than one occupant in a given vehicle. A tree diagram depicting the breakdown of the relevant frontal crash occupants considered in this analysis is provided in Figure I–1. The weighted 14-year total count of MAIS 2+ or fatal occupants in each level is shown. Data presented in this analysis have not been adjusted to account for air bag presence, changes in data collection procedures by case year, and to match fatality counts from the Fatality Analysis Reporting System (FARS). The counts presented are therefore only indicative of relative contributions—actual counts may differ.

Table I–1 shows counts of the occupants further broken down by MAIS 2+, MAIS 3+, or fatal and by seat row. Note that some fatally-injured occupants do not have injury data coded, and are therefore not represented in the MAIS 2+ or 3+ columns. This leads to small differences in calculated totals from Table I–1 and Figure I–1. Another difference between the counts shown in Figure I–1 and Table I–1 is that variant impacts, in which the PDOF angle is from the opposite side of the partial overlap, are merged into the ''Other'' category due to their unique occupant kinematics characteristics. Partial overlap crashes where the angle of obliquity is on the same side as the crush are considered coincident.[314]

[308] These are generic dimensions, by vehicle class, that are used as a guide for determining whether the damage is small overlap or not. See Bean, J., Kahane, C., Mynatt, M., Rudd, R., Rush, C., & Wiacek, C., National Highway Traffic Safety Administration, ''Fatalities in Frontal Crashes Despite Seat Belts and Air Bags,'' DOT HS 811 202, September 2009 for more detail.

[309] Bean, J., Kahane, C., Mynatt, M., Rudd, R., Rush, C., & Wiacek, C., National Highway Traffic Safety Administration, ''Fatalities in Frontal Crashes Despite Seat Belts and Air Bags,'' DOT HS 811 202, September 2009.

[310] Ibid.

[311] Saunders, J. & Parent, D., ''Repeatability of a Small Overlap and an Oblique Moving Deformable Barrier Test Procedure,'' SAE World Congress, Paper No. 2013–01–0762, 2013.

[312] Rudd, R., Scarboro, M., & Saunders, J., ''Injury Analysis of Real-World Small Overlap and Oblique Frontal Crashes,'' The 22nd International Technical Conference for the Enhanced Safety of Vehicles, Paper No. 11–0384, 2011.

[313] NHTSA is currently investigating this topic, and may revise its approach to categorizing frontal crashes as either co-linear or oblique.

[314] Halloway, D., Pintar, F., Saunders, J., & Barsan-Anelli, A. (2012) ''Classifiers to Augment the CDC System to Distinguish the Role of Structure in a Frontal Impact Taxonomy.'' SAE International Journal of Passenger Cars—Mechanical Systems, 5(2):778–788.

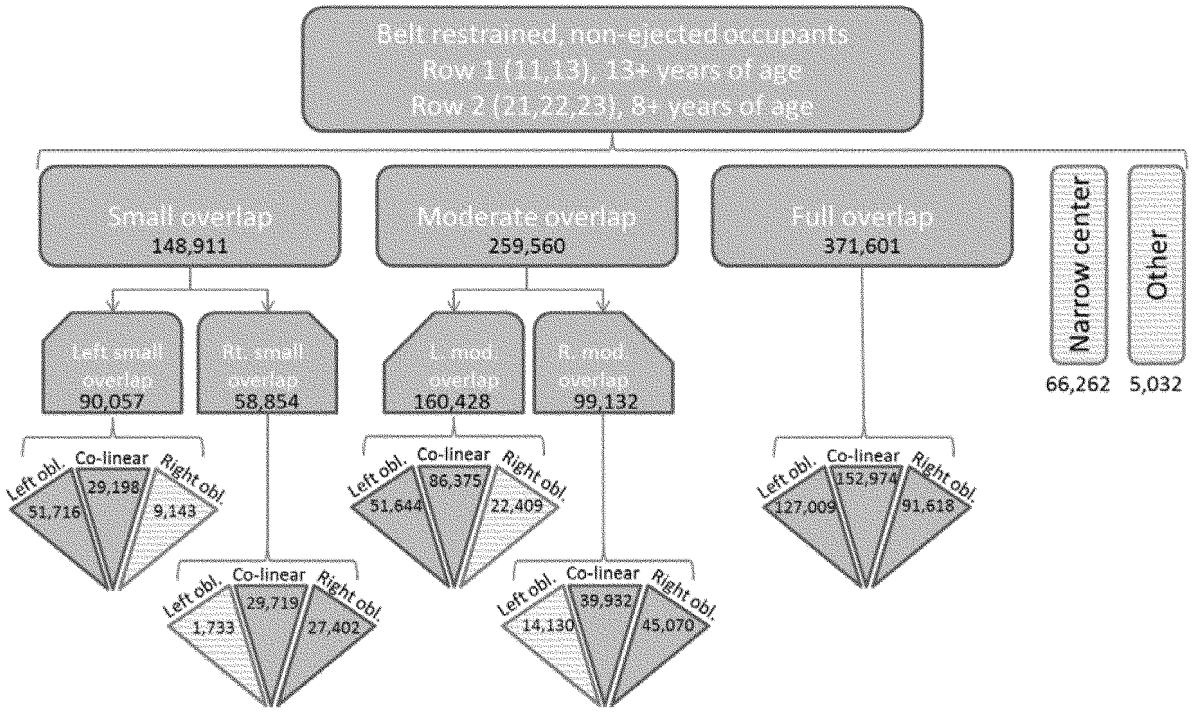

Figure I-1: Breakdown of MAIS 2+ or fatal frontal crash occupants by overlap and obliquity.

Counts represent weighted totals from 2000-2013 NASS-CDS.

TABLE I–1—DISTRIBUTION OF TOTAL WEIGHTED OCCUPANTS FOR THE FOURTEEN YEAR PERIOD BY CRASH TYPE (OVERLAP) AND OBLIQUITY FOR MAIS 2+, 3+, AND FATAL SEVERITY LEVELS

Overlap	Front row				Second row		
	Obliquity	MAIS 2+	MAIS 3+	Fatal	MAIS 2+	MAIS 3+	Fatal
Full	Co-linear	147,234	34,351	7,162	2,578	330	98
	Left	124,204	29,343	3,843	2,045	1,173	84
	Right	89,851	26,986	3,033	936	323	82
Left moderate	Co-linear	85,518	17,662	1,432	627	255	0
	Left	47,278	16,352	1,864	3,725	845	426
Right moderate	Co-linear	39,055	10,067	813	728	141	52
	Right	43,922	7,998	589	1,096	109	0
Left small	Co-linear	28,251	9,697	616	831	440	0
	Left	51,000	16,038	2,252	630	52	0
Right small	Co-linear	29,584	7,798	813	42	4	0
	Right	26,361	6,609	346	1,004	78	0
Narrow center	All angles	64,971	22,302	3,041	907	568	228
Other	*	51,574	10,187	1,241	817	250	0
Total		828,803	215,390	27,045	15,966	4,568	970

* Includes small and moderate overlap crashes with variant obliquity (*e.g.* left small overlap with right oblique PDOF angle). Source: NASS–CDS (2000–2013)

With left and right partial overlap broken out into co-linear and coincident groups, the next step is to look at co-linear versus oblique crashes. The counts in Table I–1 are combined into co-linear full overlap, oblique, and co-linear moderate overlap groups and annualized by dividing by the number of case years (14) included in the analysis. It is important to note that Table I–2 does not distinguish between left and right oblique crashes—they are pooled together at this stage.

TABLE I–2—DISTRIBUTION OF OCCUPANTS BY CRASH OBLIQUITY FOR MAIS 2+, 3+, AND FATAL SEVERITY LEVELS

[Annualized unadjusted occupants counts]

Crash mode	Front row			Second row		
	MAIS 2+	MAIS 3+	Fatal	MAIS 2+	MAIS 3+	Fatal
Co-linear full overlap	10,517	2,454	512	184	24	7
Co-linear moderate overlap	8,898	1,981	160	97	28	4
Oblique	31,461	8,630	954	736	216	42
Narrow center	4,641	1,593	217	65	41	16
Other frontal *	3,684	728	89	58	18	0
Total	59,200	15,385	1,932	1,140	326	69

*Other frontal includes variant impacts and crashes that cannot be categorized due to missing data.
Source: NASS–CDS (2000–2013).

Left oblique and right oblique crashes are similar in that the occupants' trajectories are not straight forward relative to the vehicle interior, but the side of obliquity results in the near-side and far-side occupants experiencing different conditions (a driver would be considered a near-side occupant in a left oblique crash while the right front passenger would be a far-side occupant). Left oblique crashes represent a greater proportion of the oblique crashes, and Table I–3 excludes the right oblique crashes (although 80% of the 0° right moderate overlap crashes have been accounted for in the co-linear full overlap category).

TABLE I–3—DISTRIBUTION OF OCCUPANTS IN LEFT OBLIQUE AND CO-LINEAR FRONTAL CRASHES FOR MAIS 2+, 3+, AND FATAL SEVERITY LEVELS

[Annualized unadjusted occupants counts]

Crash mode	Front row			Second row		
	MAIS 2+	MAIS 3+	Fatal	MAIS 2+	MAIS 3+	Fatal
Co-linear full overlap	12,747	3,028	558	226	32	10
Co-linear left moderate overlap	6,108	1,262	102	45	18	0
Left oblique	17,910	5,102	613	517	179	36
Total	36,765	9,392	1,273	787	229	46

Source: NASS–CDS (2000–2013).

Applying the 80/20 rule previously described for the 0° left moderate overlap crashes leads to the counts shown in Table I–4, which shows the annualized target population for co-linear and left oblique frontal crashes. A graphical depiction of the distribution of MAIS 2+ counts is shown in Figure I–2. The counts shown are annualized, unadjusted counts, and represent the number of MAIS 2+, 3+, or fatal occupants in each crash and obliquity group.

TABLE I–4—DISTRIBUTION OF OCCUPANTS IN LEFT OBLIQUE AND CO-LINEAR FRONTAL CRASHES FOR MAIS 2+, 3+, AND FATAL SEVERITY LEVELS AFTER REDEFINING THE DATASET USING NHTSA'S APPROACH ON CATEGORIZING OBLIQUE CRASHES *

Crash mode	Front row			Second row		
	MAIS 2+	MAIS 3+	Fatal	MAIS 2+	MAIS 3+	Fatal
Co-linear full overlap	17,634	4,037	640	261	46	10
Left oblique	19,131	5,354	633	525	183	36
Total	36,765	9,392	1,273	787	229	46

* For the co-linear moderate overlap crashes, 20% were assigned to their respective oblique category with the remaining 80% being assigned to the co-linear category.
Source: NASS–CDS (2000–2013).

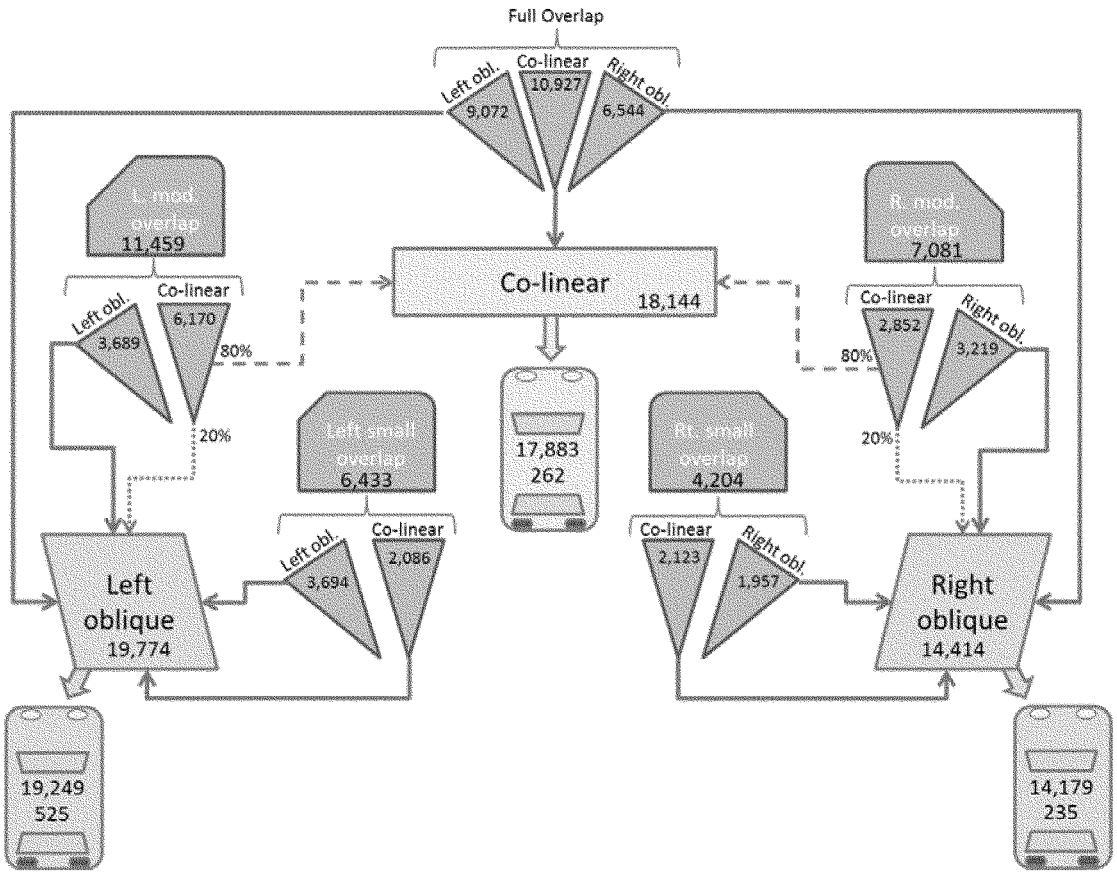

Figure I-2: Breakdown of MAIS 2+ or fatal frontal crash occupants by overlap and obliquity.

Counts represent weighted annualized totals from 2000-2013 NASS-CDS for front and second row occupants. Counts displayed are front row and second row combined, except in the vehicle diagrams that include the counts broken out by seat row.

Using the co-linear and left oblique crash groups described above, the injuries are examined in further detail by looking at counts of occupants sustaining MAIS 3+ injuries by body region. The body regions described below are based on the AIS body region identifier (first digit of AIS code) with some exceptions. The head includes face injuries, brain injuries (except brain stem), and skull fractures. The neck region includes soft tissue neck, cervical spine, brain stem, internal carotid artery, and vertebral artery injuries. The lower extremity is broken into a knee, thigh, hip (KTH) region and a below knee region.

TABLE I–5—COUNTS OF OCCUPANTS SUSTAINING MAIS 3+ INJURIES BY BODY REGION (ANNUALIZED UNADJUSTED OCCUPANTS COUNTS) IN CO-LINEAR FRONTAL CRASHES

Body region	Driver	Right front passenger	Front row total	Second row left	Second row right	Second row total
Head	628	50	678	3	7	10
Neck & C-spine	214	20	234	1	2	3
Chest	1,629	250	1,879	4	11	15
Abdomen	325	37	362	3	11	14
Knee/Thigh/Hip	808	127	935	2	3	5
Below Knee	642	53	695	0	0	0
T&L-spine	242	19	261	4	4	8
Upper Extremity	564	140	704	2	0	2

Source: NASS–CDS (2000–2013).

TABLE I–6—COUNTS OF OCCUPANTS SUSTAINING MAIS 3+ INJURIES BY BODY REGION (ANNUALIZED UNADJUSTED OCCUPANTS COUNTS) IN OBLIQUE FRONTAL CRASHES

Body region	Driver	Right front passenger	Front row total	Second row left	Second row right	Second row total
Head	696	76	771	66	14	80
Neck & C-spine	421	24	445	25	24	49
Chest	1,430	345	1,775	100	86	186
Abdomen	499	121	620	132	34	166
Knee/Thigh/Hip	1,285	133	1,418	30	8	38
Below Knee	1,012	26	1,038	80	3	83
T&L-spine	43	46	89	34	26	60
Upper Extremity	1,145	187	1,332	276	42	318

Source: NASS–CDS (2000–2013).

Appendix II: Planned THOR 50th Percentile Male Injury Risk Curves for Use in This NCAP Upgrade

Criterion [ref]	Calculation	Variable	Variable Definition	Risk Function
HIC_{15} [NCAP Final Decision Notice, 2008]	$HIC_{15} = \left\{(t_2 - t_1)\left[\frac{1}{(t_2 - t_1)}\int_{t_1}^{t_2} a(t)dt\right]^{2.5}\right\}_{max}$	t_1	Beginning of time window in s	$p(AIS \geq 3) = \Phi\left[\frac{\ln(HIC_{15}) - 7.45231}{0.73998}\right]$
		t_2	End of time window in s	
		$a(t)$	Head CG resultant acceleration in g	
$BrIC$ [Takhounts, 2013]	$BrIC = \sqrt{\left(\frac{\max(\lvert\omega_x\rvert)}{\omega_{xC}}\right)^2 + \left(\frac{\max(\lvert\omega_y\rvert)}{\omega_{yC}}\right)^2 + \left(\frac{\max(\lvert\omega_z\rvert)}{\omega_{zC}}\right)^2}$	$\omega_{[x,y,z]}$	Angular velocity of the head about the local [x, y, or z] axis, in rad/s, filtered at CFC60	$p(AIS \geq 3) = 1 - e^{-\left(\frac{BrIC}{0.987}\right)^{2.84}}$
		$\omega_{[x,y,z]C}$	Critical angular velocities in rad/s	
		ω_{xC}	66.25 rad/s	
		ω_{yC}	56.45 rad/s	
		ω_{zC}	42.87 rad/s	
N_{ij} [Eppinger, 1999]	$N_{ij} = \frac{F_z}{F_{zc}} + \frac{M_y}{M_{yc}}$	F_z	Z-axis force measured at upper neck load cell in N	$p(AIS \geq 3) = \frac{1}{1 + e^{3.227 - 1.969N_{ij}}}$
		F_{zc}	Critical force (tension or compression) in N [2520/-3640]	
		M_y	Y-axis moment measured at upper neck load cell Nm	

		M_{yc}	Critical moment (flexion or extension) in Nm [48/-72]	
cN_{ij} [TBD]	$cN_{ij} = \frac{F_z}{F_{zc}} + \frac{M_y}{M_{yc}}$	F_z	Z-axis force measured at upper neck load cell in N	$p(AIS \geq 3) = 1 - e^{-\left(\frac{cN_{ij}}{0.83}\right)^{2.71}}$
		F_{zc}	Critical force (tension or compression) in N [3216/-4227]	
		M_y	Y-axis moment measured at upper neck load cell Nm	
		M_{yc}	Critical moment (flexion or extension) in Nm [67/-94]	
Multi-point Thoracic Injury Criterion – Peak Resultant Deflection [Crandall, 2013]	$R_{max} = max(UL_{max}, UR_{max}, LL_{max}, LR_{max})$ where $[U/L\|R/L]_{max} = max\left(\sqrt{[L/R]X^2_{[U/L]S} + [L/R]Y^2_{[U/L]S} + [L/R]Z^2_{[U/L]S}}\right)$	R_{max}	Overall peak resultant deflection in mm	$P(AIS \geq 3 \mid age, R_{max}) = 1 - exp\left(-\left[\frac{R_{max}}{exp(4.4853 - 0.0113age)}\right]^{5.03896}\right)$
		$[U/L\|R/L]_{max}$	Peak resultant deflection of the [upper/lower | left/right] quadrant in mm	
		$[L/R][X/Y/Z]^2_{[U/L]S}$	Time-history of the [left/right] chest deflection along the [X/Y/Z] axis relative to the [upper/lower] spine segment in mm	
Multi-point Thoracic Injury Criterion – PC	$PCA\ Score = 0.485\left(\frac{up_{tot}}{17.509}\right) + 0.499\left(\frac{low_{tot}}{15.526}\right)$	up_{tot}	total upper chest resultant deflection, independent of time	$P(AIS3+ \mid age, PCA\ Score) = 1$

Score [Crandall, 2013]	$+ 0.493\left(\frac{up_{dif}}{10.479}\right) + 0.522\left(\frac{low_{dif}}{11.996}\right)$ $up_{tot} = \lvert UL\rvert_{max} + \lvert UR\rvert_{max}$ $up_{dif} = \lvert UL - UR\rvert_{max}$ $low_{tot} = \lvert LL\rvert_{max} + \lvert LR\rvert_{max}$ $low_{dif} = \lvert LL - LR\rvert_{max}$	up_{dif}	maximum difference in upper chest left and right resultant deflection time-histories	$- exp\left(-\left[\frac{PCA\ Score}{exp(2.6092 - 0.0133age)}\right]^{4.4444}\right)$
		low_{tot}	total lower chest resultant deflection, independent of time	
		low_{dif}	maximum difference in lower chest left and right resultant deflection time-histories	
Abdomen Compression [Kent, 2008]	$A_{max} = \frac{\max(\delta L, \delta R)}{d_{abd}}$	$\delta[L, R]$	Peak X-axis deflection of the left or right abdomen in mm	$p(AIS \geq 3) = 1 - e^{-\left(\frac{A_{max}}{0.4247}\right)^{3.6719}}$
		d_{abd}	Undeformed depth of the abdomen [238.4 mm]	
Acetabulum Load [Martin, 2011]	$F_R = \sqrt{{F_x}^2 + {F_y}^2 + {F_z}^2}$	$F_{[x,y,z]}$	X-, Y-, and Z- axis force measured at the acetabulum load cell in kN	$p(AIS \geq 3) = \Phi\left[\frac{\ln(1.3F_R) - 1.6526}{0.1991}\right]$
Femur Axial Load [Kuppa, 2001]		F_z	Z-axis femur load in kN, filtered at CFC600	$p(AIS \geq 2) = \frac{1}{1 + e^{5.7949 - 0.5196F_z}}$
Revised Tibia Index [Kuppa, 2001]	$RTI = \frac{F}{F_c} + \frac{M}{M_c}$	F	Measured compressive axial force in kN	$p(AIS \geq 2) = 1 - exp\left(-exp\left[\frac{ln(RTI) - 0.2468}{0.2728}\right]\right)$
		F_c	Critical compressive axial force [12 kN]	

		M	Measured bending moment in Nm (resultant of medial-lateral and anterior-posterior directions)	
		M_c	Critical bending moment [240 Nm]	
Distal Tibia Axial Force [Kuppa, 2001]		F_z	Z-axis lower tibia load in kN, filtered at CFC600	$p(AIS \geq 2) = \frac{1}{1 + e^{4.572 - 0.670F_z}}$
Proximal Tibia Axial Force [Kuppa, 2001]		F_z	Z-axis upper tibia load in kN, filtered at CFC600	$p(AIS \geq 2) = \frac{1}{1 + e^{5.6654 - 0.8189F_z}}$
Dorsiflexion Moment [Kuppa, 2001]	$M_{y_{ankle}} = M_Y - F_x D - \frac{ma_x D}{2}$	M_Y	Y-axis moment measured at lower tibia load cell in Nm	$p(AIS \geq 2) = \frac{1}{1 + e^{6.535 - 0.1085M_y}}$
		F_x	X-axis force measured at lower tibia load cell in N	
		D	Distance between ankle joint and lower tibia load cell [0.0907m]	
		m	Mass between ankle joint and lower tibia load cell [0.72kg]	
		a_x	X-axis acceleration of the tibia in m/s^2	
Inversion/ Eversion	$M_{x_{ankle}} = M_x - F_y D - \frac{ma_y D}{2}$	M_x	X-axis moment measured at lower tibia load cell in Nm	$p(AIS \geq 2) = \Phi\left[\frac{M_x - 40Nm}{10Nm}\right]$

Moment [Kuppa, 2001]		F_y	Y-axis force measured at lower tibia load cell in N	
		D	Distance between ankle joint and lower tibia load cell [0.0907m]	
		m	Mass between ankle joint and lower tibia load cell [0.72kg]	
		a_y	Y-axis acceleration of the tibia in m/s^2	

Appendix III: Planned Hybrid III 5th Percentile Female Injury Risk Curves for Use in this NCAP Upgrade

Criterion [ref]	Calculation	Variables	Variable Definition	Risk Function
HIC_{15} [NCAP Final Decision Notice, 2008]	$HIC_{15} = \left\{(t_2 - t_1)\left[\frac{1}{(t_2 - t_1)}\int_{t_1}^{t_2} a(t)dt\right]^{2.5}\right\}_{max}$	t_1	Beginning of time window in s	$p(AIS \geq 3) = \Phi\left[\frac{\ln(HIC_{15}) - 7.45231}{0.73998}\right]$
		t_2	End of time window in s	
		$a(t)$	Head CG resultant acceleration in g	
$BrIC$ [Takhounts, 2013]	$BrIC = \sqrt{\left(\frac{\max(\lvert\omega_x\rvert)}{\omega_{xC}}\right)^2 + \left(\frac{\max(\lvert\omega_y\rvert)}{\omega_{yC}}\right)^2 + \left(\frac{\max(\lvert\omega_z\rvert)}{\omega_{zC}}\right)^2}$	$\omega_{[x,y,z]}$	Angular velocity of the head about the local [x, y, or z] axis, in rad/s, filtered at CFC60	$p(AIS \geq 3) = 1 - e^{-\left(\frac{BrIC}{0.987}\right)^{2.84}}$
		$\omega_{[x,y,z]C}$	Critical angular velocities in rad/s	
		ω_{xC}	66.25 rad/s	
		ω_{yC}	56.45 rad/s	
		ω_{zC}	42.87 rad/s	
Neck Tension or Compression [NCAP Final Decision Notice, 2008]		F_z	Z-axis force measured at upper neck load cell in kN	$p(AIS \geq 3) = \frac{1}{1 + e^{10.958 - 3.770F_z}}$
N_{ij}	$N_{ij} = \frac{F_z}{F_{zc}} + \frac{M_y}{M_{yc}}$	F_z	Z-axis force measured at upper neck load cell in N	$p(AIS \geq 3) = 1 - e^{\left(-\left(\frac{N_{ij}}{1.3933}\right)^{2.8816}\right)}$
		F_{zc}	Critical force (tension or compression) in N [4287/-3880]	
		M_y	Y-axis moment measured at upper neck load cell Nm	

		M_{yc}	Critical moment (flexion or extension) in Nm [155/-67]	
Chest Deflection [NCAP Final Decision Notice, 2008]		δ	Peak X-axis deflection at chest potentiometer in mm	$p(AIS \geq 3) = \frac{1}{1 + e^{12.597 - 0.05861 * 35 - 1.568 * (\frac{\delta}{0.817})^{0.4612}}}$
Femur Axial Force [NCAP Final Decision Notice, 2008]		F_z	Z-axis femur force in kN	$p(AIS \geq 2) = \frac{1}{1 + e^{5.7949 - 0.7619 F_z}}$

Appendix IV: Planned WorldSID 50th Percentile Male Injury Risk Curves for Use in This NCAP Upgrade

Criterion [ref]	Calculation	Variables	Variable Definition	Risk Function
HIC_{36} [NCAP Final Decision Notice, 2008]	$HIC_{36} = \left\{(t_2 - t_1)\left[\frac{1}{(t_2 - t_1)}\int_{t_1}^{t_2} a(t)dt\right]^{2.5}\right\}_{max}$	t_1	Beginning of time window in s	$p(AIS \geq 3) = \Phi\left[\frac{\ln(HIC_{36}) - 7.45231}{0.73998}\right]$
		t_2	End of time window in s	
		$a(t)$	Head CG resultant acceleration in g	
$BrIC$ [Takhounts, 2013]	$BrIC = \sqrt{\left(\frac{\max(\lvert\omega_x\rvert)}{\omega_{xC}}\right)^2 + \left(\frac{\max(\lvert\omega_y\rvert)}{\omega_{yC}}\right)^2 + \left(\frac{\max(\lvert\omega_z\rvert)}{\omega_{zC}}\right)^2}$	$\omega_{[x,y,z]}$	Angular velocity of the head about the local [x, y, or z] axis, in rad/s, filtered at CFC60	$p(AIS \geq 3) = 1 - e^{-\left(\frac{BrIC}{0.987}\right)^{2.84}}$
		$\omega_{[x,y,z]C}$	Critical angular velocities in rad/s	
		ω_{xC}	66.25 rad/s	
		ω_{yC}	56.45 rad/s	
		ω_{zC}	42.87 rad/s	
Shoulder Force [Petitjean, 2012]		F_Y	Y-axis maximum shoulder load in N, filtered at CFC600	$p(AIS \geq 2) = 1 - e^{-\left(\frac{F_Y}{8.144 - 0.006age}\right)^{7.41}}$
Skeletal Thoracic Injury [Petitjean, 2012]		δ_{max}	Y-axis maximum thoracic or abdominal rib deflection in *mm*, filtered at CFC600	$p(AIS \geq 3) = \frac{1}{1 + e^{\left(\frac{-(\ln(\delta_{max}) - (4.670 - 0.015age))}{0.123}\right)}}$
Soft Tissue Abdominal Injury [Petitjean, 2012]		δ_{max}	Y-axis maximum abdominal rib deflection in *mm*, filtered at CFC600	$p(AIS \geq 2) = 1 - e^{-\left(\frac{\delta_{max}}{5.358 - 0.021age}\right)^{8.61}}$
Pubic Force [Petitjean, 2012]		F_Y	Y-axis pubic force in N, filtered at CFC600	$p(AIS \geq 2) = 1 - e^{-\left(\frac{F_Y}{8.775 - 0.014age}\right)^{4.60}}$

Appendix V: WorldSID–50M and WorldSID–5F NHTSA Test Numbers

TABLE 1—TEST NUMBERS OF NHTSA WORLDSID–50M AND WORLDSID–5F TESTS

	Size	Year	Make	Model	Test Nos.	
					Pole	MDB
Passenger Car	Compact	2010	Suzuki	SX4	7658	8349
		2010	Kia	Forte	7657	8348
	Mid-Size	2011	Hyundai	Sonata	7653	8351
		2010	Buick	LaCrosse	7654	8352
	Large	2011	Cadillac	CTS	7661	8346
SUV/Crossover	Compact	2011	Hyundai	Tucson	7659	8347
	Mid-Size	2011	Acura	MDX	7656	8353
		2010	Chevy	Traverse	7655	Not tested
	Large	2011	Jeep	Grand Cherokee	7660	8345
		2011	Ford	Explorer	7662	8344
Truck	Mid-Size	2010	Ford	F150	7652	8343
Van		2011	Honda	Odyssey	7663	8350
Other		2012	Chevy	Traverse	Not tested	8354

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Appendix VI: Planned SID-IIs 5th Percentile Female Injury Risk Curves for Use in this NCAP Upgrade

Criterion [ref]	Calculation	Variables	Variable Definition	Risk Function
HIC_{36} [NCAP Final Decision Notice, 2008]	$HIC_{36} = \left\lvert (t_2 - t_1)\left[\frac{1}{(t_2 - t_1)}\int_{t_1}^{t_2} a(t)dt\right]^{2.5}\right\rvert_{max}$	t_1	Beginning of time window in s	$p(AIS \geq 3) = \Phi\left[\frac{\ln(HIC_{36}) - 7.45231}{0.73998}\right]$
		t_2	End of time window in s	
		$a(t)$	Head CG resultant acceleration in g	
$BrIC$ [Takhounts, 2013]	$BrIC = \sqrt{\left(\frac{\max(\lvert\omega_x\rvert)}{\omega_{xC}}\right)^2 + \left(\frac{\max(\lvert\omega_y\rvert)}{\omega_{yC}}\right)^2 + \left(\frac{\max(\lvert\omega_z\rvert)}{\omega_{zC}}\right)^2}$	$\omega_{[x,y,z]}$	Angular velocity of the head about the local [x, y, or z] axis, in rad/s, filtered at CFC60	$p(AIS \geq 3) = 1 - e^{-\left(\frac{BrIC}{0.987}\right)^{2.84}}$
		$\omega_{[x,y,z]C}$	Critical angular velocities in rad/s	
		ω_{xC}	66.25 rad/s	
		ω_{yC}	56.45 rad/s	
		ω_{zC}	42.87 rad/s	
Thoracic Rib Deflection [Kuppa, 2006]		δ_{max}	Y-axis maximum thoracic rib deflection in *mm*, filtered at CFC600	$p(AIS \geq 3) = \frac{1}{1 + e^{5.8627 - 0.15498 * \delta_{max}}}$
Abdominal Rib Deflection [Kuppa, 2006]		δ_{max}	Y-axis maximum abdomen rib deflection in *mm*, filtered at CFC600	$p(AIS \geq 4) = \frac{1}{1 + e^{8.9798 - 0.1349 * \delta_{max}}}$
Acetabular + Iliac Force [NCAP Final Decision Notice, 2008]	$F_T = F_{Ya} + F_{Yi}$	F_{Ya}	Y-axis acetabular load in N, filtered at CFC600	$p(AIS \geq 2) = \frac{1}{1 + e^{6.3055 - 0.00094 * F_T}}$ *where F_T is the total sum of the acetabular and iliac force in Newtons*
		F_{Yi}	Y-axis iliac load in N, filtered at CFC600	

Appendix VII: Pedestrian Data

TABLE VII–1—PEDESTRIAN INJURIES AND FATALITIES IN SINGLE-VEHICLE CRASHES BY VEHICLE TYPE, 2012

Applicable vehicles	Class of vehicle	Injuries		Fatalities	
Covered by proposed pedestrian safety regulation.	Passenger cars	30,071	48,373	1,781	2,879
	Minivans	3,476		218	
	Cross-over vehicles	3,776		270	
	Small SUVs and pickups	11,050		610	
	Large SUVs and vans	4,960	11,811	308	839
	Large pickup trucks	6,851		531	
Not covered	Large trucks or buses	2,202		445	
	Motorcycles	641		29	
	Unknown vehicle	9,149		626	
	Totals	72,176		4,818	

Sources: NHTSA's Fatality Analysis Reporting System (FARS) and National Automotive Sampling System—General Estimates System (NASS GES).

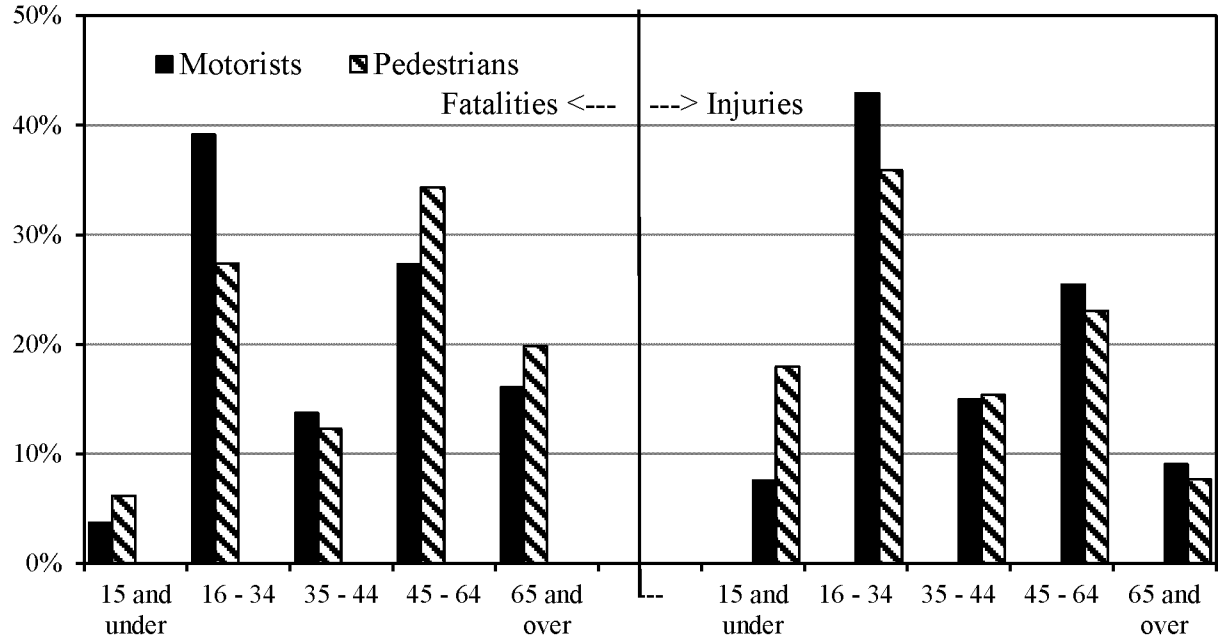

Figure VII-1: Percentage of U.S. traffic fatalities and injuries by age, 2012

Sources: FARS and GES

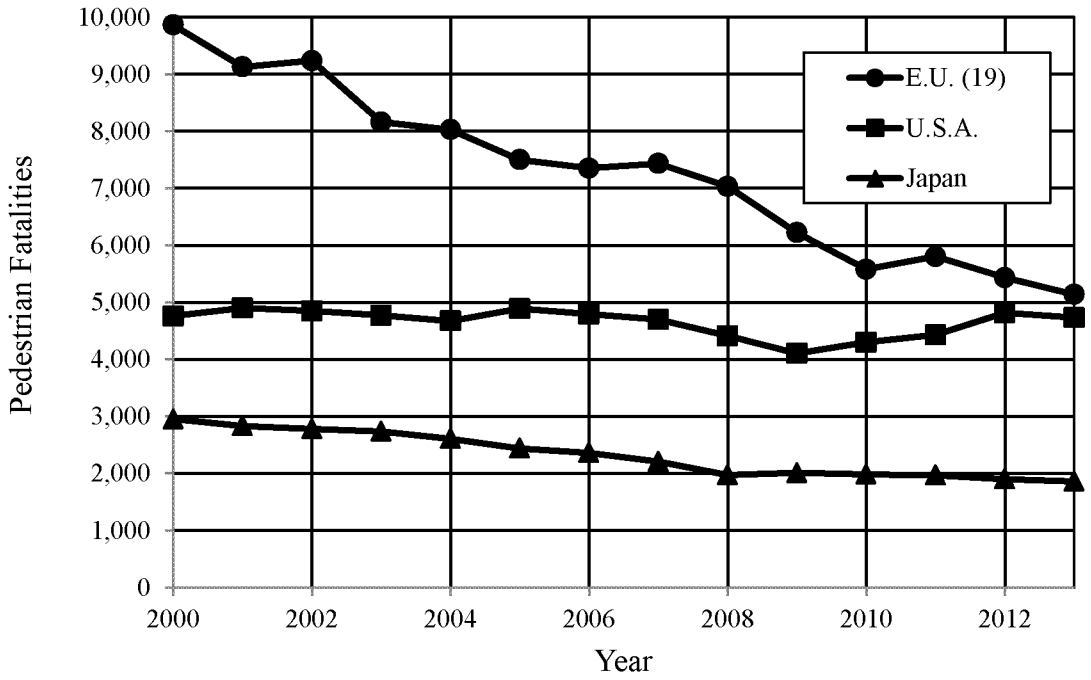

Figure VII-2: Pedestrian fatality trends in Europe, the U.S., and Japan

Sources: FARS (U.S.), European Road Safety Observatory (E.U.), Institute for Traffic Accidents Research and Data Analysis (Japan)

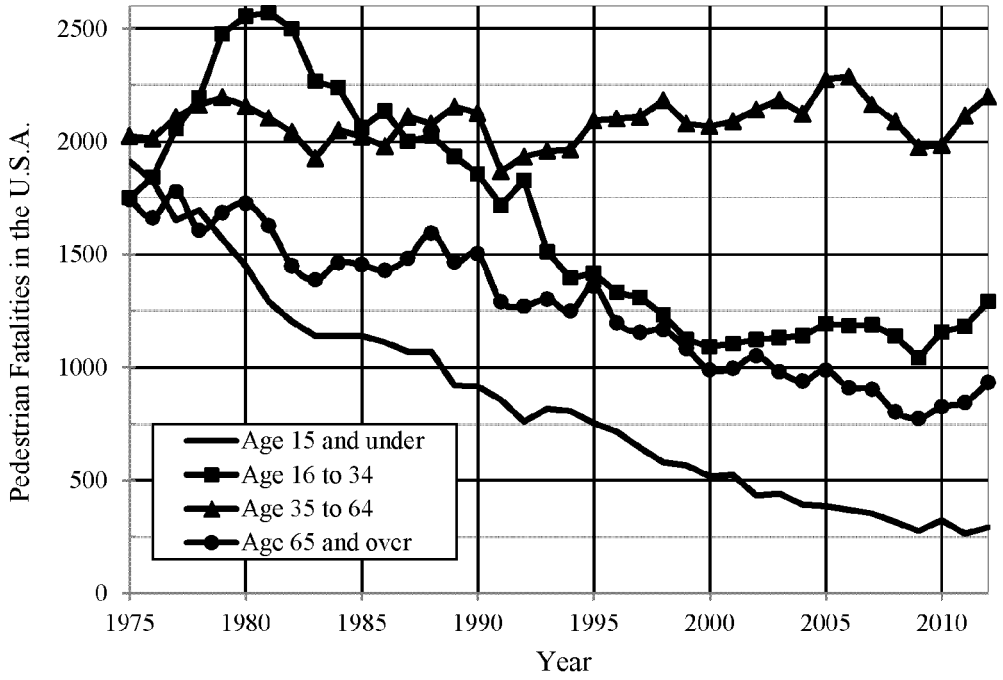

Figure VII-3: Year-by year pedestrian fatalities in the U.S., 1975 onward

Source: FARS

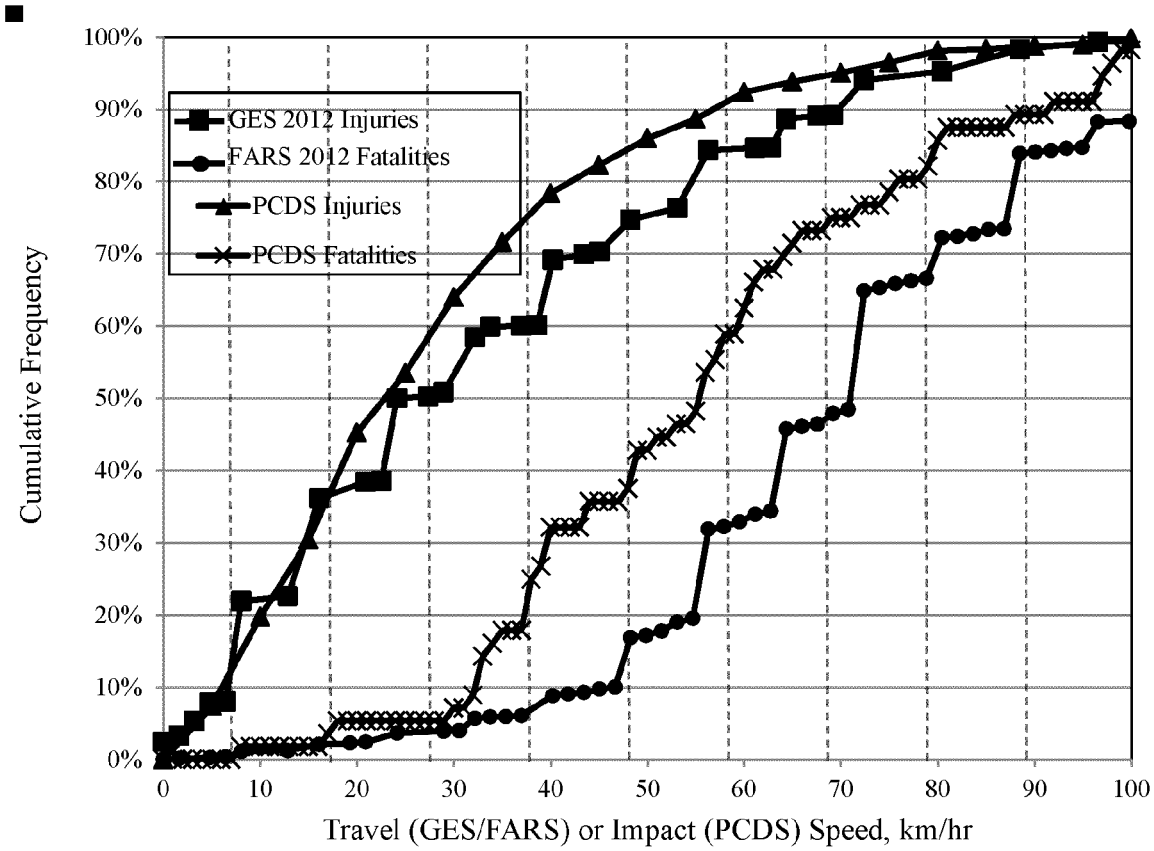

Figure VII-4: PCDS (1994-1998) and FARS/GES (2012) speed distributions for pedestrian fatalities

Sources: FARS/GES, 2012. PCDS (NHTSA)

Appendix VIII: Crash Avoidance Test Procedures

Crash Avoidance test procedures discussed in this Request for Comment may be found in the docket identified at the beginning of this RFC notice. Duplicate copies of test procedures already incorporated into the NCAP program will also reside at the NHTSA Web site via this link: *www.safercar.gov/Vehicle+Shoppers/5-Star+Safety+Ratings/NCAP+Test+Procedures*.

Crash avoidance technology	Test procedure	Status
Amber Rear Turn Signal Lamps	Amber Rear Turn Signal Lamps Confirmation Test for NCAP (Working Draft), December 2015.	New, Draft.
Blind Spot Detection	Blind Spot Detection System Confirmation Test (Working Draft), December 2015.	New, Draft.
Crash Imminent Braking	Crash Imminent Brake System Performance Evaluation for NCAP (Working Draft), September 2015.	Existing.
Dynamic Brake Support	Dynamic Brake Support System Performance Evaluation Confirmation Test, September 2015.	Existing.
Forward Collision Warning	Forward Collision Warning System Confirmation Test (February 2013)	Existing.
Lane Departure Warning	Lane Departure Warning System Confirmation Test and Lane Keeping Support Performance Documentation (February 2013).	Existing.
Lower Beam Headlighting	Lower Beam Headlighting Visibility Confirmation Test (December 2015)	New, Draft.
Rear automatic braking	Rear Automatic Braking Feature Confirmation Test Procedure (December 2015).	New, Draft.
Rollover Resistance	Laboratory Test Procedure for Dynamic Rollover, The Fishhook Maneuver Test Procedure (March 2013).	Existing.
	Laboratory Test Procedure for Rollover Stability Measurement for NCAP Static Stability Factor (SSF) Measurement (March 2013).	Existing.
Semi-automatic Headlamp Beam Switching	Semiautomatic Headlamp Beam Switching Device Confirmation Test (Working Draft), December 2015.	New, Draft.

Issued in Washington, DC on December 8, 2015. Under authority delegated in 49 CFR 1.95.

Mark R. Rosekind,

Administrator.

[FR Doc. 2015–31323 Filed 12–15–15; 8:45 am]

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Part VI

Department of Transportation

Federal Aviation Administration

14 CFR Parts 1, 45, 47, et al.
Registration and Marking Requirements for Small Unmanned Aircraft; Final Rule

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Parts 1, 45, 47, 48, 91, and 375

[Docket No.: FAA–2015–7396; Amdt. Nos. 1–68, 45–30, 47–30, 48–1, 91–338]

RIN 2120–AK82

Registration and Marking Requirements for Small Unmanned Aircraft

AGENCY: Federal Aviation Administration (FAA), Department of Transportation (DOT).

ACTION: Interim final rule.

SUMMARY: This action provides an alternative, streamlined and simple, web-based aircraft registration process for the registration of small unmanned aircraft, including small unmanned aircraft operated as model aircraft, to facilitate compliance with the statutory requirement that all aircraft register prior to operation. It also provides a simpler method for marking small unmanned aircraft that is more appropriate for these aircraft. This action responds to public comments received regarding the proposed registration process in the Operation and Certification of Small Unmanned Aircraft notice of proposed rulemaking, the request for information regarding unmanned aircraft system registration, and the recommendations from the Unmanned Aircraft System Registration Task Force. The Department encourages persons to participate in this rulemaking by submitting comments on or before the closing date for comments. The Department will consider all comments received before the closing date and make any necessary amendments as appropriate.

DATES: This rule is effective December 21, 2015. Comments must be received on or before January 15, 2016.

ADDRESSES: Send comments identified by docket number FAA–2015–7396 using any of the following methods:

Federal eRulemaking Portal: Go to *http://www.regulations.gov* and follow the online instructions for sending your comments electronically.

Mail: Send comments to Docket Operations, M–30; U.S. Department of Transportation (DOT), 1200 New Jersey Avenue SE., Room W12–140, West Building Ground Floor, Washington, DC 20590–0001.

Hand Delivery or Courier: Take comments to Docket Operations in Room W12–140 of the West Building Ground Floor at 1200 New Jersey Avenue SE., Washington, DC, between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays.

Fax: Fax comments to Docket Operations at 202–493–2251.

Privacy: In accordance with 5 U.S.C. 553(c), DOT solicits comments from the public to better inform its rulemaking process. DOT posts these comments, without edit, including any personal information the commenter provides, to *http://www.regulations.gov*, as described in the system of records notice (DOT/ALL–14 FDMS), which can be reviewed at *http://www.dot.gov/privacy*.

Docket: Background documents or comments received may be read at *http://www.regulations.gov* at any time. Follow the online instructions for accessing the docket or go to the Docket Operations in Room W12–140 of the West Building Ground Floor at 1200 New Jersey Avenue SE., Washington, DC, between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays.

FOR FURTHER INFORMATION CONTACT: Earl Lawrence, Director, FAA UAS Integration Office, 800 Independence Avenue SW., Washington, DC 20591; telephone (202) 267–6556; email *UASRegistration@faa.gov*.

SUPPLEMENTARY INFORMATION:

Table of Contents

I. Executive Summary

A. Purpose of the Regulatory Action

This interim final rule (IFR) provides an alternative process that small unmanned aircraft owners may use to comply with the statutory requirements for aircraft operations. As provided in the clarification of these statutory requirements and request for further information issued October 19, 2015, 49 U.S.C. 44102 requires aircraft to be registered prior to operation. *See* 80 FR 63912 (October 22, 2015). Currently, the only registration and aircraft identification process available to

comply with the statutory aircraft registration requirement for all aircraft owners, including small unmanned aircraft, is the paper-based system set forth in 14 CFR parts 45 and 47. As the Secretary and the Administrator noted in the clarification issued October 19, 2015 and further analyzed in the regulatory evaluation accompanying this rulemaking, the Department and the FAA have determined that this process is too onerous for small unmanned aircraft owners and the FAA. Thus, after considering public comments and the recommendations from the Unmanned Aircraft System (UAS) Registration Task Force, the Department and the FAA have developed an alternative process, provided by this IFR (14 CFR part 48), for registration and marking available only to small unmanned aircraft owners. Small unmanned aircraft owners may use this process to comply with the statutory requirement to register their aircraft prior to operating in the National Airspace System (NAS).

The estimate for 2015 sales indicates that 1.6 million small unmanned aircraft intended to be used as model aircraft are expected to be sold this year (including approximately 50 percent of that total during the fourth quarter of 2015). With this rapid proliferation of new sUAS will come an unprecedented number of new sUAS owners and operators who are new to aviation and thus have no understanding of the NAS or the safety requirements for operating in the NAS.

The risk of unsafe operation will increase as more small unmanned aircraft enter the NAS. Registration will provide a means by which to quickly identify these small unmanned aircraft in the event of an incident or accident involving the sUAS. Registration of small unmanned aircraft also provides an immediate and direct opportunity for the agency to educate sUAS owners on safety requirements before they begin operating.

All owners of small unmanned aircraft, including small unmanned aircraft operated as a model aircraft in accordance with the statutory requirements for model aircraft operations in section 336 of the FAA Modernization and Reform Act of 2012, Public Law 112–95, may take advantage of the new registration process in part 48. The part 47 paper-based registration process will remain available for owners to register small unmanned aircraft due to financing requirements, ownership arrangements, or intent to operate a sUAS outside of the United States. For more information regarding both the statutory requirements for model aircraft operations and the authorizations that may be needed for operations that do not satisfy the requirements for model aircraft, please consult the materials available on the FAA Web site, including the Know Before You Fly materials, available at *www.faa.gov/uas.*

B. Summary of the Major Provisions

Table 1 provides a brief summary of the major provisions of this IFR.

TABLE 1—SUMMARY OF MAJOR PROVISIONS.

Issue	Interim final rule requirement
Unmanned aircraft covered by the registration requirement.	Unmanned aircraft weighing less than 55 pounds and more than 0.55 pounds (250 grams) on takeoff, including everything that is on board or otherwise attached to the aircraft and operated outdoors in the national airspace system must register. § 48.15
Timing of registration	Owners of small unmanned aircraft must register their aircraft prior to operation of the sUAS. § 48.15
Compliance dates	December 21, 2015 • Any small unmanned aircraft to be used exclusively as model aircraft that have never been operated. • Small unmanned aircraft to be used in authorized operations as other than model aircraft continue to use part 47 registration process. February 19, 2016 • Small unmanned aircraft to be used exclusively as model aircraft and have been operated by their owner prior to December 21, 2015. March 31, 2016 • Small unmanned aircraft to be used in authorized operations other than as model aircraft continue to use part 47 registration process or use part 48 process. § 48.5
Minimum age to register a small unmanned aircraft.	Persons 13 years of age and older are permitted to use the part 48 process to register a small unmanned aircraft. If the owner is less than 13 years of age, then the small unmanned aircraft must be registered by a person who is at least 13 years of age. § 48.25
Registration platform	Registration will occur through an online web-based system. § 48.100(c)
Registration number	Each small unmanned aircraft intended to be used other than as a model aircraft and owned by individuals or other persons, including corporations, will be issued a Certificate of Aircraft Registration with a unique registration number. § 48.110(a) A Certificate of Aircraft Registration and registration number issued to an individual intending to use small unmanned aircraft exclusively as model aircraft, constitutes registration for those small unmanned aircraft owned by that individual that are intended to be used exclusively as model aircraft. § 48.115(a)
Registration information	Required information from persons registering small unmanned aircraft intended to be used as other than model aircraft. • Applicant name or name of authorized representative. • Applicant physical address (and mailing address if different than physical address). • Applicant e-mail address or email address of authorized representative. • Aircraft manufacturer and model name, and serial number, if available. • Other information as required by the Administrator. Required information from individuals registering small unmanned aircraft intended to be used exclusively as model aircraft. • Applicant name. • Applicant physical address (and mailing address if different than physical address).

TABLE 1—SUMMARY OF MAJOR PROVISIONS.—Continued

Issue	Interim final rule requirement
	• Applicant e-mail address. • Other information as required by the Administrator. § 48.100
Registration fee	Persons intending to use the small unmanned aircraft other than as model aircraft. • $5 to register each aircraft. Individuals intending to use the small unmanned aircraft exclusively as model aircraft. • $5 to register an individual's fleet of small unmanned aircraft. § 48.30
Delivery of Certificate of Aircraft Registration.	Upon completion of the registration process, the Certificate of Aircraft registration will be delivered to the aircraft owner via the same web-based platform used to register the aircraft. § 48.100(d)
Information contained on the Certificate of Aircraft Registration.	Small unmanned aircraft owner name, issue date and registration number.
Registration renewal and fee	A Certificate of Aircraft Registration issued in accordance with part 48 is effective once the registration process is complete and must be renewed every three years. The fee for renewal of a Certificate of Aircraft Registration is $5. §§ 48.110(c), 48.115(c)
Marking	All small unmanned aircraft must display a unique identifier. • A unique identifier is the FAA-issued registration number. • The Administrator may authorize the use of the small unmanned aircraft serial number. § 48.200

C. Summary of Costs and Benefits

In order to implement the new streamlined, web-based system described in this IFR, the FAA will incur costs to develop, implement, and maintain the system. Small UAS owners will require time to register and mark their aircraft, and that time has a cost. The total of government and registrant resource cost for small unmanned aircraft registration and marking under this new system is $56 million ($46 million present value at 7 percent) through 2020.

In evaluating the impact of this interim final rule, we compare the costs and benefits of the IFR to a baseline consistent with existing practices: for modelers, the exercise of discretion by FAA (not requiring registration) and continued broad public outreach and educational campaign, and for non-modelers, registration via part 47 in the paper-based system. Given the time to register aircraft under the paper-based system and the projected number of sUAS aircraft, the FAA estimates the cost to the government and non-modelers would be about $383 million. The resulting cost savings to society from this IFR equals the cost of this baseline policy ($383 million) minus the cost of this IFR ($56 million), or about $327 million ($259 million in present value at a 7 percent discount rate). These cost savings are the net quantified benefits of this IFR.

II. Compliance

Any small unmanned aircraft operated exclusively as a model aircraft by its current owner prior to December 21, 2015 must be registered no later than February 19, 2016. The delayed compliance date provides a period of time to bring the existing population of small unmanned aircraft owners into compliance as it is not reasonable to expect that all existing small unmanned aircraft owners will register their aircraft immediately upon the effective date of this rule.

All other small unmanned aircraft intended to be used exclusively as model aircraft (*i.e.,* for hobby and recreational purposes in accordance with the requirements of section 336 of Pub. L. 112–95)—newly purchased or never before used—must be registered prior to the first operation outdoors. Thus, any small unmanned aircraft purchased, received as a gift, or otherwise acquired on or after December 21, 2015, and intended to be used exclusively as a model aircraft must be registered prior to operation.

Currently, small unmanned aircraft operated as other than model aircraft (*i.e.,* for operations for non-hobby or non-recreational purposes or as a public aircraft) must continue to complete the part 47 registration process in accordance with the conditions and limitations of exemptions issued under section 333 of Public Law 112–95. As exemplified by the growing number of petitions for exemption, the agency expects to see a continued high level of demand for registration of aircraft used for purposes other than model aircraft once the Operation and Certification of Small Unmanned Aircraft Systems notice of proposed rulemaking (the ''sUAS Operation and Certification NPRM'') is finalized.[1] The small unmanned aircraft registration system established by this final rule will be able to receive and process applications for Certificates of Aircraft Registration for aircraft operating pursuant to an exemption issued under section 333 of Public Law 112–95 beginning March 31, 2016. Thus, beginning on March 31, 2016, the agency will allow small unmanned aircraft operating pursuant to an exemption to use the new part 48 registration requirements in place of part 47, as well as aircraft used in operations authorized under the sUAS Operation and Certification rulemaking, once the rule is finalized.

III. Good Cause for Immediate Adoption

Section 553(b)(3)(B) of the Administrative Procedure Act (APA) (5 U.S.C.) authorizes agencies to dispense with notice and comment procedures for rules when the agency for ''good cause'' finds that those procedures are ''impracticable, unnecessary, or contrary to the public interest.'' Under this section, an agency, upon finding good cause, may issue a final rule without seeking comment prior to the rulemaking.

The Secretary and the Administrator recently affirmed that all unmanned aircraft, including model aircraft, are aircraft consistent with congressional direction in Title III, Subtitle B of Public Law 112–95 and the existing definition of aircraft in title 49 of the United States Code. 49 U.S.C. 40102. As such, in accordance with 49 U.S.C 44101(a) and

[1] 80 FR 9544 (Feb. 23, 2015).

as further prescribed in 14 CFR part 47, registration is required prior to operation. *See* 80 FR 63912, 63913 (October 22, 2015). Aircraft registration is necessary to ensure personal accountability among all users of the NAS. *See* id. With the current unprecedented proliferation of new sUAS, registration allows the FAA a direct and immediate opportunity to educate sUAS owners. Aircraft registration also allows the FAA and law enforcement agencies to address non-compliance by providing the means by which to identify an aircraft's owner and operator.

Congress has also directed the FAA to ''develop plans and policy for the use of the navigable airspace and assign by regulation or order the use of the airspace necessary to ensure the safety of aircraft and the efficient use of airspace.'' 49 U.S.C. 40103(b)(1). Congress has further directed the FAA to ''prescribe air traffic regulations on the flight of aircraft (including regulations on safe altitudes)'' for navigating, protecting, and identifying aircraft; protecting individuals and property on the ground; using the navigable airspace efficiently; and preventing collision between aircraft, between aircraft and land or water vehicles, and between aircraft and airborne objects. 49 U.S.C. 40103(b)(2).

The FAA estimates that in calendar year 2014, 200,000 small unmanned aircraft were operated in the NAS in model aircraft operations. During this period, the FAA received 238 reports of potentially unsafe UAS operations. The estimate for 2015 sales indicates that 1.6 million small unmanned aircraft intended to be used as model aircraft are expected to be sold this year (including approximately 50 percent of that total during the fourth quarter of 2015).

For 2016, the FAA estimates sales of more than 600,000 sUAS intended to be used for commercial purposes.[2] Additionally, as evidenced by recent FAA enforcement action against SkyPan International,[3] the Department and the FAA have become aware that there may be commercial operators who may be risking operating without the requisite authority.

Since February 2015, reports of potentially unsafe UAS operations have more than doubled, and many of these reports indicated that the risk to manned aviation or people and property on the ground was immediate. For example, the agency has received reports of unmanned aircraft at high altitudes in congested airspace, unmanned aircraft operations near passenger-carrying aircraft or major airports,[4] and interfering with emergency response operations such as efforts to combat wildfires.[5] As recently as August 2015, the FAA investigated reports by four pilots who spotted an unmanned aircraft flying between eight and thirteen miles from the approach to Newark Liberty International Airport.[6] The FAA also investigated a similar incident at John F. Kennedy International Airport in August.[7] The risk of unsafe operation will increase as more small unmanned aircraft enter the NAS, and are flown by individuals who have little to no knowledge of airspace restrictions or safety implications.

Over the past several months, the reports of unauthorized and potentially unsafe UAS operations have escalated at an increasing rate. There is good reason to believe that the numbers of incidents will continue to rise substantially with the projected rapid rise in UAS sales in the coming months. The following tables show the number of reports received during 2014 and 2015.

TABLE 2—UNMANNED AIRCRAFT REPORTS, 2014

2014	Unmanned aircraft reports												
Month	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sept	Oct	Nov	Dec	Total
Count	0	1	2	5	11	16	36	30	41	41	33	22	238

TABLE 3—UNMANNED AIRCRAFT REPORTS, 2015

2015	Unmanned aircraft reports											
Month	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sept	Oct	Nov	Total
Count	26	50	85	64	95	132	128	193	127	137	96	1133

* As of December 9, 2015.

Specific examples of UAS events include:

• June 17, 2015: Near the surrounding area of Big Bear City, CA, a fire erupted, quickly spreading and causing significant damage. By June 24, 2015, all surrounding affected areas were evacuated, 20,875 acres of land had been destroyed, and the fire was only 26% contained. Although the FAA issued a temporary flight restriction for the area surrounding the fire, unmanned aircraft penetrated the airspace and grounded all airborne firefighting efforts in support of continued fire containment. This event resulted in two reported evasive-action events, and forced the grounding of 4 responding aircraft over a period of two and a half hours before airborne firefighting efforts could resume. Before landing, a DC–10 tanker plane diverted to a separate fire in Nevada to drop its fire retardant, while the remaining smaller planes were forced to dump fire retardant around the immediate area due to landing weight restrictions.[8] Officials

[2] This forecast is based on a largely unconstrained operating environment.

[3] FAA Press Release, ''FAA Proposes $1.9 Million Civil Penalty Against SkyPan International for Allegedly Unauthorized Unmanned Aircraft Operations,'' available at *http://www.faa.gov/news/press_releases/news_story.cfm?newsId=19555*.

[4] *See, e.g.,* Keith Laing, *Feds investigating drone sighting near Newark airport,* The Hill, Aug. 10, 2015, *http://thehill.com/policy/transportation/250731-feds-investigating-drone-sighting-near-newark-airport*; *FAA Investigating Close Calls with Drones Near JFK Airport,* Albany Business Review, Nov. 20, 2014, *available at* 2014 WLNR 32783307.

[5] *See, e.g.,* Associated Press, *Drones Interfering with Emergency Wildfire Responders,* CBSNEWS.com, Aug. 10, 2015, *http://www.cbsnews.com/news/drones-interfering-with-emergency-wildfire-responders* (''The U.S. Forest Service has tallied 13 wildfires in which suspected drones interfered with firefighting aircraft this year . . . up from four fires last year . . . .); Polly Mosendz, *Drones Interfere With Firefighters Battling California Wildfire,* Newsweek, June 26, 2015, *http://www.newsweek.com/drones-interfere-firefighters-battling-california-wildfire-347774.*

[6] *See* Keith Laing, *Feds investigating drone sighting near Newark airport,* The Hill, Aug. 10, 2015, *http://thehill.com/policy/transportation/250731-feds-investigating-drone-sighting-near-newark-airport.*

[7] *See FAA Investigating Close Calls with Drones Near JFK Airport,* Albany Business Review, Nov. 20, 2014, *available at* 2014 WLNR 32783307.

[8] *Lake Fire Grew After Private Drone Flight Disrupted Air Flights,* Los Angeles Times, June 25,

Continued

said the failed mission cost between $10,000 and $15,000. This estimate only reflects operational costs and does not reflect the additional damage caused to property by the delay in being able to combat the fires.

• July 17, 2015: A fire began in California near Interstate 15, a highway that runs between Los Angeles and Las Vegas. Due to hot, 40 mile per hour winds, the fire spread at a rapid pace. The Air Attack Officer, upon arrival, observed small unmanned aircraft activity operating contrary to a temporary flight restriction in the area. This resulted in aircraft being removed from the area for a period of twenty minutes. The delay of 20 minutes in aircraft response was critical in the growth of the fire. With the heavy aviation response on the scene of the fire, Air Attack Officers estimate this fire could have been stopped at less than 100 acres if the small unmanned aircraft had not interfered by penetrating the airspace.[9] A total of eighteen vehicles and two trucks were destroyed by fire.

• September 3, 2015: An unmanned aircraft was flown into Louis Armstrong Stadium, which is located within 5 miles of LaGuardia Airport, during a U.S. Open tennis match. The unmanned aircraft crashed in an empty section of the stands.[10]

• October 26, 2015: An unmanned aircraft flew into primary conductors bringing down one span of power line in West Hollywood, California. The incident report from Southern California Edison indicates that initially 640 customers were impacted.[11]

• January 26, 2015: An unmanned aircraft operator crashed his unmanned aircraft on the grounds of the White House. The flight occurred in the White House prohibited flight zone, P56.[12]

• September 5, 2015: A University of Kentucky student flew an unmanned aircraft directly into the campus' stadium during the school's season-opening football game.[13] No injuries were reported. The unmanned aircraft, which had hovered near parachuting military skydivers, crashed in the suite level of Commonwealth Stadium. The Kentucky campus police chief told a news conference that the same student operated an unmanned aircraft over a soccer match the previous week.

• September 12, 2015: Debris from an unmanned aircraft that had fallen near bystanders cut and bruised an 11-month-old girl in a stroller during an outdoor movie screening in Pasadena, California. The Pasadena Police Department said a 24-year-old man lost control of his small unmanned aircraft, causing it to crash to the ground. The 11-month-old received injuries to her head. She was treated at Huntington Memorial Hospital and then released.[14]

During the last quarter of this calendar year, approximately 800,000 new sUAS are expected to enter the system and begin operating. In 2016, the FAA expects sales of an additional 1.9 million small unmanned aircraft used as model aircraft. The FAA also expects sales of 600,000 aircraft used for other than model purposes, after the Operation and Certification of Small Unmanned Aircraft Systems notice of proposed rulemaking (the ''sUAS Operation and Certification NPRM'') is finalized.[15] Model aircraft sales alone are expected to grow by 23 percent each year for the next 5 years.[16] Sales for sUAS used for commercial applications will rapidly accelerate as well, with different growth rates in different applications. Sales are forecast to grow from very few sUAS employed commercially today, to nearly 11 million units by 2020 (about 40% of total units sold that year).

Many of the owners of these new sUAS may have no prior aviation experience and have little or no understanding of the NAS, let alone knowledge of the safe operating requirements and additional authorizations required to conduct certain operations. Aircraft registration provides an immediate and direct opportunity for the agency to engage and educate these new users prior to operating their unmanned aircraft and to hold them accountable for noncompliance with safe operating requirements, thereby mitigating the risk associated with the influx of operations. In light of the increasing reports and incidents of unsafe incidents, rapid proliferation of both commercial and model aircraft operators, and the resulting increased risk, the Department has determined it is contrary to the public interest to proceed with further notice and comment rulemaking regarding aircraft registration for small unmanned aircraft. To minimize risk to other users of the NAS and people and property on the ground, it is critical that the Department be able to link the expected number of new unmanned aircraft to their owners and educate these new owners prior to commencing operations.

In addition to the safety justifications that support the immediate adoption of this rule, the FAA Aircraft Registration Branch (the Registry) will be unable to quickly process the total volume of expected small unmanned aircraft registration applications for existing unmanned aircraft and the proliferation of newly purchased unmanned aircraft. Thus, the FAA must implement a registration system that allows the agency greater flexibility in accommodating this expected growth.

In addition, the existing registration system requirements are incongruous with the characteristics of many of the small unmanned aircraft, small unmanned aircraft ownership, and small unmanned aircraft operations. For example, small unmanned aircraft are not required to be type certificated, may cost very little, making them widely accessible, and may have operating limitations that could affect the range of their operations. As reflected in greater detail in the regulatory evaluation supporting this rulemaking, the total costs for using the paper-based registry, for both the small unmanned aircraft owners and for the FAA, were projected to exceed $775M over a 5-year period. The Department has determined it would be impracticable to require all small unmanned aircraft owners to use this system and that a stream-lined, web-based alternative is necessary to accommodate this population and ensure operations may commence in a safe and timely manner.

The streamlined registration process provided in this IFR will allow the agency to complete in the near-term the registration of existing and new small unmanned aircraft to be operated exclusively as model aircraft, where the FAA expects the largest growth in the coming months. In the spring of 2016, the FAA will open the streamlined registration process to small unmanned

2015, *available at http://www.latimes.com/local/lanow/la-me-ln-wildfires-southern-california-20150625-story.html.*

[9] SAFECOM (2015, July 18). Incident Report. Retrieved November 13, 2015 from *https://www.safecom.gov/searchone.asp?ID=19694.*

[10] *Drone Crash at U.S. Open, New York City Teacher Arrested,* NPR, September 4, 2015, *available at http://www.npr.org/sections/thetwo-way/2015/09/04/437539727/drone-crash-at-u-s-open-new-york-city-teacher-arrested.*

[11] Incident report from Robert Laffoon-Villegas, media relations, Southern California Edison, provided November 13, 2015.

[12] *A Drone, Too Small for Radar to Detect, Rattles the White House.* New York Times, Jan. 26, 2015, *available at http://www.nytimes.com/2015/01/27/us/white-house-drone.html.*

[13] *Student Charged with Endangerment After Drone Crashes into Stadium,* Ars Technica, September 11, 2015, *available at http://arstechnica.com/tech-policy/2015/09/student-charged-with-endangerment-after-drone-crashes-into-football-stadium/.*

[14] *Fallen Drone Injures 11-mointh old near Pasadena City Hall,* Pasadena Star News, September 15, 2015 *available at http://www.pasadenastarnews.com/general-news/20150915/falling-drone-injures-11-month-old-near-pasadena-city-hall.*

[15] 80 FR 9544 (Feb. 23, 2015).

aircraft used for purposes other than as model aircraft. By first addressing the registration of new small unmanned aircraft to be operated exclusively as model aircraft, the FAA expects to provide relief from the existing registration process to the largest population of new small unmanned aircraft operators while still realizing the fundamental goal of identification of small unmanned aircraft owners responsible for the aircraft operation.

Therefore, the FAA has determined that it is impracticable and contrary to the public interest in ensuring the safety of the NAS and people and property on the ground to proceed with further notice and comment on aircraft registration requirements for small unmanned aircraft before implementing the streamlined registry system established by this rule. As more small unmanned aircraft enter the NAS, the risk of unsafe operations will increase without a means by which to identify these small unmanned aircraft in the event of an incident or accident. Registration will also provide an immediate and direct avenue for educating users regarding safe and responsible use of sUAS. The public interest served by the notice and comment process is outweighed by the significant increase in risk that the public will face with the immediate proliferation of new small unmanned aircraft that will be introduced into the NAS in the weeks ahead.

In developing the IFR, the Department has considered the public comments regarding UAS registration received in response to the Operation and Certification of Small UAS NPRM, the Request for Information published in the **Federal Register** on October 22, 2015, and the recommendations from the UAS Registration Task Force. Although we have considered these comments in developing this IFR, the Department will consider additional comments received following publication of this IFR and make any necessary adjustments in the final rule. At this time however, due to the reasons set forth above, providing another opportunity for notice and comment in advance of this rule going into effect would be contrary to the public interest and impracticable.

Additionally, the APA requires agencies to delay the effective date of regulations for 30 days after publication, unless the agency finds good cause to make the regulations effective sooner. *See* 5 U.S.C. 553(d). Good cause exists for making this regulation effective less than 30 days from the date of publication because it relieves a significant number of owners from the burden of complying with the paper-based, time-consuming part 47 registration process. It also is necessary to address immediate and ongoing safety risk identified in the discussion of above regarding good cause for forgoing notice and comment.

IV. Comments Invited

Prior to the issuance of this IFR, the Department and the FAA solicited public comment on the aircraft registration process for small unmanned aircraft through the sUAS Operation and Certification NPRM and a request for information issued on October 19, 2015. In developing this IFR, the agency has considered comments received in response to these requests.

In addition, consistent with the Regulatory Policies and Procedures of the Department of Transportation (DOT) (44 FR 11034; Feb. 26, 1979), which provide that to the maximum extent possible, operating administrations for the DOT should provide an opportunity for public comment on regulations issued without prior notice, the Department requests comment on this IFR. The Department encourages persons to participate in this rulemaking by submitting comments containing relevant information, data, or views. The Department will consider comments received on or before the closing date for comments. The Department will consider late filed comments to the extent practicable. This IFR may be amended based on comments received.

V. Authority for This Rulemaking

The FAA's authority to issue rules on aviation safety is found in Title 49 of the United States Code. Subtitle I, Section 106 describes the authority of the FAA Administrator. Subtitle VII, Aviation Programs, describes in more detail the scope of the agency's authority.

This rulemaking is promulgated under the authority described in 49 U.S.C. 106(f), which establishes the authority of the Administrator to promulgate regulations and rules; and 49 U.S.C. 44701(a)(5), which requires the Administrator to promote safe flight of civil aircraft in air commerce by prescribing regulations and setting minimum standards for other practices, methods, and procedures necessary for safety in air commerce and national security.

This rule is also promulgated pursuant to 49 U.S.C. 44101–44106 and 44110–44113 which require aircraft to be registered as a condition of operation and establish the requirements for registration and registration processes.

Additionally, this rulemaking is promulgated pursuant to the Secretary's authority in 49 U.S.C. 41703 to permit the operation of foreign civil aircraft in the United States.

VI. Background

A. Statutory Requirements Related to Aircraft Registration

For purposes of the statutory provisions in part A (Air Commerce and Safety) of subtitle VII (Aviation Programs) of title 49 of the United States Code (49 U.S.C.), title 49 defines ''aircraft'' as ''any contrivance invented, used, or designed to navigate or fly in the air.'' 49 U.S.C. 40102(a)(6). Since a small unmanned aircraft is a contrivance that is invented, used, and designed to fly in the air, a small unmanned aircraft is an aircraft under title 49.

In Public Law 112–95, Congress confirmed that unmanned aircraft, including those used for recreation or hobby purposes, are aircraft consistent with the statutory definition set forth in 49 U.S.C. 40102(a)(6). *See* Public Law 112–95 sections 331(8) and 336 (defining an unmanned aircraft as ''an aircraft that is operated without the possibility of direct human intervention from within or on the aircraft'' and a model aircraft as ''an unmanned aircraft that is capable of sustained flight in the atmosphere, flown within visual line of sight of the person operating the aircraft, and flown for hobby or recreational purposes.''); *see also Administrator* v. *Pirker,* NTSB Order No. EA–5730 at 12 (Nov. 17, 2014) (affirming that the statutory definition of aircraft is clear and unambiguous and ''includes any aircraft, manned or unmanned, large or small.'').

Subject to certain exceptions, aircraft must be registered prior to operation. *See* 49 U.S.C. 44101–44103. Upon registration, the Administrator must issue a certificate of registration to the aircraft owner. *See* 49 U.S.C. 44103. Because small UAS, including model aircraft, involve the operation of ''aircraft,'' the Secretary and the Administrator clarified that the statutory and regulatory aircraft registration requirements apply. *See* 80 FR 63912, October 22, 2015.

B. Regulatory Requirements Pertaining to Aircraft Registration and Identification

The regulatory requirements pertaining to aircraft registration serve several purposes. In order to operate in the NAS, the FAA must ensure not only that aircraft operators are aware of the system in which they are operating, but

also that the agency has a means to identify and track an aircraft, including unmanned aircraft, to its operator. One means to accomplish this is through aircraft registration and marking.

Aircraft registration and marking are essential elements in the regulatory structure that provides for safe and orderly aircraft activity within the NAS because registration ensures accountability among its users. The registration number provides a link to information about the aircraft and the owner responsible for its operations.

Aircraft registration information often has a direct and immediate impact on safety-related issues. For example, aircraft registration provides the FAA and law enforcement agencies an invaluable tool during inspections and investigations of inappropriate or prohibited behavior, during emergency situations and for purposes of sharing safety information. The Registry also serves as a valuable tool in enabling further research and analysis.

Additionally, the aircraft registration requirements in part 47 together with the requirements pertaining to the recording of aircraft title and security documents in part 49 coalesce to establish a filing and recording system for the collection of ownership and financial interests in aircraft. This system supports the aviation industry by providing public notice of interests in aircraft in a reviewable format, generally to support the confidence or willingness of banks and others to provide financing for the development of the U.S. aviation industry and to promote commerce.

Part 47: Part 47 of 14 CFR implements the statutory requirements for aircraft registration by providing a registration process applicable to aircraft that are not registered under the laws of a foreign country and that meet one of the following ownership criteria:

- The aircraft is owned by a citizen of the United States;
- The aircraft is owned by a permanent resident of the United States;
- The aircraft is owned by a corporation that is not a citizen of the United States, but that is organized and doing business under U.S. Federal or State law and the aircraft is based and primarily used in the United States; or
- The aircraft is owned by the United States government or a state or local governmental entity.

This process is entirely paper-based and begins when a person who wishes to register an aircraft in the United States submits an Aircraft Registration Application (AC Form 8050–1) to the Registry. At a minimum, under part 47, applicants for a Certificate of Aircraft Registration must provide evidence of ownership, an application for registration, which includes certification as to eligibility for registration, and a registration fee. Evidence of ownership may include, but is not limited to, a traditional bill of sale, a contract of conditional sale, a lease with purchase option, or an heir-at-law affidavit. Many applicants are required to provide additional documentation for aircraft imported from a foreign country, built from a kit, or that qualify as amateur built aircraft. Additional documentation may include a certification from the builder as to the type of aircraft and a complete description, to include information such as make, model, serial number, engine manufacturer, type of engine, number of engines, maximum takeoff weight, and number of seats. An applicant who applies as a limited liability corporation, a trustee, a non-citizen corporation, or submits documentation signed by ''authorized signers,'' must submit additional documentation to support registration. For amateur built aircraft, the owner or builder designates the aircraft model name and serial number. An applicant pertaining to an imported aircraft must provide evidence showing the aircraft has been removed from a foreign registry.

Once registered, the Registry issues a Certificate of Aircraft Registration (AC Form 8050–3) to the aircraft owner and mails it to the address on record. The Registry experiences a range in the amount of time required to issue a Certificate. While it typically takes 12–15 business days for the registry to issue a Certificate after an owner submits an application, due to an increase in registration applications, it currently takes approximately 22 business days for the registry to issue the certificate. The aircraft owner will typically receive a Certificate approximately 4 days after it is issued as a result of the time required for printing and mailing the certificate. The estimated times are extended if the application is rejected for document correction.

The certificate of registration must be carried in the aircraft and must be made available for inspection upon request. Upon registration, an aircraft is also eligible to apply for an airworthiness certificate for operational purposes. When applying for registration of an aircraft that is already on the U.S. civil registry, and has a valid airworthiness certificate, an owner may use the second (carbon) copy of the application as temporary operating authority for up to 90 days pending receipt of the ''hard card'' certificate. For aircraft not already on the U.S. civil registry, there is no temporary operating authority.

An aircraft registration must be renewed every three years by either submitting a renewal application or using an online renewal process, and paying the renewal fee. The certificate of registration is generally valid until the owner's address changes, the aircraft is sold or destroyed, it has expired under the three-year renewal period, the owner's eligibility status changes, or the owner registers the aircraft in a foreign country.

Placing an aircraft on the U.S. civil aircraft registry in accordance with the part 47 process affords the aircraft the opportunity to operate within the United States and in most foreign countries.

Part 45: Under part 45 of Title 14 CFR, aircraft must display the unique registration number that corresponds with the number on the registration certificate. Part 45 prescribes the requirements for identification of U.S. registered aircraft and the display of the registration number. The number must generally be: (1) Painted on the aircraft or affixed to the aircraft by some other permanent means; (2) have no ornamentation; (3) contrast in color with the background; and (4) be legible. *See* 14 CFR 45.21(c).

Currently, small unmanned aircraft authorized to operate in the NAS under an exemption issued pursuant to the authority in section 333 of the FAA Modernization and Reform Act of 2012 must register in accordance with the paper-based process in 14 CFR part 47. Owners of unmanned aircraft with special airworthiness certificates and unmanned aircraft used by governmental entities in public aircraft operations also register via the part 47 registration process.

C. Related FAA and DOT Actions

In the FAA Modernization and Reform Act of 2012 (Pub. L. 112–95), Congress mandated that the DOT, in consultation with other government partners and industry stakeholders, develop a comprehensive plan to safely accelerate the integration of civil UAS in the NAS. Since 2012, the Department and the Federal Aviation Administration have made progress in enabling UAS operations, by issuing exemptions per part 11 in conjunction with the authority of section 333 of Public Law 112–95 to permit commercial operations; creating a UAS test site program to encourage further research and testing of UAS operations in real-world environments; and developing a Pathfinder program to encourage research and innovation that

will enable advanced UAS operations. The Department requires UAS operators authorized under each of these integration programs to register their unmanned aircraft through the existing FAA paper-based registration process under 14 CFR part 47.

The Department and the FAA have taken several other related actions as provided in the preamble discussions that follow.

1. Operation and Certification of Small Unmanned Aircraft Systems Notice of Proposed Rulemaking

The Secretary and the Administrator issued an NPRM, ''Operation and Certification of Small Unmanned Aircraft Systems'' (80 FR 9544 (Feb. 23, 2015)) (sUAS Operation and Certification NPRM),[17] that proposed a framework for integrating small UAS operations in the NAS. Specifically, the proposal would address the operation of small UAS, certification of small UAS operators, small UAS registration, and display of registration markings. The agency also proposed to exclude small UAS operations from the requirements for airworthiness certification under the authority of section 333 of the Act because the safety concerns related to airworthiness of small UAS would be mitigated by the other provisions of that proposed rule.

In the sUAS Operation and Certification NPRM, the Secretary and the Administrator asserted that small unmanned aircraft satisfy the statutory definition of ''aircraft'' and thus must be registered prior to operation. For this reason, the NPRM proposed to clarify the applicability of the part 47 aircraft registration requirements to sUAS expected to be operated under proposed part 107. *See* 80 FR at 9574. The NPRM also clarified that small unmanned aircraft must display a registration number in accordance with part 45. The agency proposed, however, to exclude small unmanned aircraft from the requirements in part 45, subpart B for fireproof marking. *See* 80 FR at 9574–9575.

The comment period for the sUAS Operation and Certification NPRM closed April 24, 2015. The FAA received more than 4,500 comments on this proposal; of those, approximately 125 commenters addressed the issue of small unmanned aircraft registration and the registration process, and approximately 110 addressed marking requirements. This IFR addresses the comments received regarding the registration, identification, and marking requirements as well as certain definitions relevant to the registration process and proposed in the NPRM.

2. Clarification of the Applicability of Aircraft Registration Requirements for Unmanned Aircraft Systems (UAS) and Request for Information Regarding Electronic Registration for UAS

On October 19, 2015, the Secretary and the Administrator issued a notice clarifying the applicability of the statutory requirements for aircraft registration to small unmanned aircraft (the ''Clarification/Request for Information'') (80 FR 63912, October 22, 2015). In addition, the Clarification/Request for Information announced the formation of a UAS Registration Task Force (Task Force) to explore and develop recommendations to streamline the registration process for small unmanned aircraft to ease the burden associated with the existing aircraft registration process. To facilitate the work of the Task Force, the Secretary and the Administrator sought information and data from the public through a number of questions identified in the **Federal Register** notice. Specifically, the Secretary and the Administrator sought information on the following questions:

1. What methods are available for identifying individual products? Does every UAS sold have an individual serial number? Is there another method for identifying individual products sold without serial numbers or those built from kits?

2. At what point should registration occur (*e.g.* point-of-sale or prior to operation)? How should transfers of ownership be addressed in registration?

3. If registration occurs at point-of sale, who should be responsible for submission of the data? What burdens would be placed on vendors of UAS if DOT required registration to occur at point-of-sale? What are the advantages of a point-of-sale approach relative to a prior-to-operation approach?

4. Consistent with past practice of discretion, should certain UAS be excluded from registration based on performance capabilities or other characteristics that could be associated with safety risk, such as weight, speed, altitude operating limitations, duration of flight? If so, please submit information or data to help support the suggestions, and whether any other criteria should be considered.

5. How should a registration process be designed to minimize burdens and best protect innovation and encourage growth in the UAS industry?

6. Should the registration be electronic or web-based? Are there existing tools that could support an electronic registration process?

7. What type of information should be collected during the registration process to positively identify the aircraft owner and aircraft?

8. How should the registration data be stored? Who should have access to the registration data? How should the data be used?

9. Should a registration fee be collected and if so, how will the registration fee be collected if registration occurs at point-of-sale? Are there payment services that can be leveraged to assist (*e.g.* PayPal)?

10. Are there additional means beyond aircraft registration to encourage accountability and responsible use of UAS?

See 80 FR at 63914. The comment period on the Clarification/Request for Information closed November 6, 2015. As of November 6, 2015, the FAA received over 4,500 comments on the Clarification/Request for Information. In the Clarification/Request for Information, the DOT stated, ''[T]he docket will remain open after this time and the Department will consider all comments received in developing a registration process.'' The FAA considered more than 175 additional comments submitted after the close of the comment period. The FAA has considered the Clarification/Request for Information comments in the development of this IFR.

3. Registration Task Force (Task Force)

The Administrator chartered the Unmanned Aircraft Systems (UAS) Registration Task Force (Task Force) Aviation Rulemaking Committee (ARC) on October 20, 2015. The Administrator selected Task Force members based on their familiarity with UAS, aircraft registration policies and procedures, retail inventory control and tracking, and electronic data capture. The membership was comprised of a diverse group of representatives from trade groups representing manned and unmanned aviation, UAS manufacturers and retailers, and law enforcement.

The Task Force was tasked with the following three objectives:

1. Develop and recommend minimum requirements for UAS that would need to be registered.

2. Develop and recommend registration processes.

3. Develop and recommend methods for proving registration and marking.

On November 21, 2015, the Task Force provided a final report with

[17] RIN 2120–AJ60.

recommendations pertaining to these three objectives.[18]

The following table, taken from the Task Force report, describes the Task Force's recommendations.

TABLE 4—SMALL UAS REGISTRATION TASK FORCE AVIATION RULEMAKING COMMITTEE RECOMMENDATIONS SUMMARY

Issue	Task force recommendation
What category of UAS is covered by the registration requirement?	UAS that weigh under 55 pounds and above 250 grams maximum takeoff weight, and are operated outdoors in the NAS.
Do owners need to register each individual UAS they own?	No. The registration system is owner-based, so each registrant will have a single registration number that covers any and all UAS that the registrant owns.
Is registration required at point-of-sale?	No. Registration is mandatory prior to operation of a UAS in the NAS.
What information is required for the registration process?	Name and street address of the registrant are required. Mailing address, email address, telephone number, and serial number of the aircraft are optional.
Is there a citizenship requirement?	No.
Is there a minimum age requirement?	Yes. Persons must be 13 years of age to register.
Is there a registration fee?	No.
Is the registration system electronic or web-based?	The system for entry of information into the database is web-based and also allows for multiple entry points, powered by an API [application programming interface] that will enable custom apps [applications] to provide registry information to the database and receive registration numbers and certificates back from the database. Registrants can also modify their information through the web or apps.
How does a UAS owner prove registration?	A certificate of registration will be sent to the registrant at the time of registration. The certificate will be sent electronically, unless a paper copy is requested, or unless the traditional aircraft registration process is utilized. The registration certificate will contain the registrant's name, FAA-issued registration number, and the FAA registration website that can be used by authorized users to confirm registration information. For registrants who elect to provide the serial number(s) of their aircraft to the FAA, the certificate will also contain those serial number(s). Any time a registered UAS is in operation, the operator of that UAS should be prepared to produce the certificate of registration for inspection.
Does the registration number have to be affixed to the aircraft?	Yes, unless the registrant chooses to provide the FAA with the aircraft's serial number. Whether the owner chooses to rely on the serial number or affix the FAA-issued registration number to the aircraft, the marking must be readily accessible and maintained in a condition that is readable and legible upon close visual inspection. Markings enclosed in a compartment, such as a battery compartment, will be considered ''readily accessible'' if they can be accessed without the use of tools.

In its report, the Task Force stated, ''[T]he general consensus view of the Task Force is that the recommendations on the three objectives are to be presented together as a unified recommendation, with each of the individual recommendations dependent upon elements in the others. Compromises in positions were made whenever possible to obtain a general consensus, and changes to any of the components could further dilute support among the Task Force members and their constituencies for the final recommendations.''

The agency has assessed the recommendations within statutory limitations provided for aircraft registration and with this final rule, will move forward with the elements of the Task Force report that support the best public policy for registering small unmanned aircraft.

VII. Discussion of the Interim Final Rule

This IFR adds part 48 to title 14 to allow for a web-based registration process and marking appropriate for small unmanned aircraft. For these aircraft, part 48 may be used in place of the paper-based, registration process in part 47 and the marking requirements in part 45 that would otherwise be required.

Unlike manned aircraft, small unmanned aircraft cost significantly less than manned aircraft and are available through a variety of different markets for purchase by individuals who may not be familiar with the federal safety requirements for operating in the NAS. As a consequence, small unmanned aircraft may become more common than manned aircraft, resulting in a significant volume of new aircraft registrations. This rule provides for a streamlined and simple registration process that is commensurate to the nature of small unmanned aircraft, can accommodate an expected high volume of registrations, and will facilitate compliance by using a web-based platform and limiting the information to that which can identify the aircraft and its owner. Upon registration under new part 48, the FAA will assign a unique registration number and provide a registration certificate that can be stored electronically or printed by the aircraft owner.

The FAA recognizes that some small unmanned aircraft owners may choose to continue to register small unmanned aircraft under part 47. For example, some small unmanned aircraft owners may choose to register their small unmanned aircraft under part 47 due to financing requirements or if they wish to operate internationally, displaying registration marks in accordance with part 45. While this final rule does not require small unmanned aircraft owners to use the part 48 registration process in place of part 47, the agency strongly encourages small unmanned aircraft owners to take advantage of the more efficient part 48 method of aircraft registration. The FAA also notes that a new part 48 registration does not limit an owner's ability to later move to a traditional part 47 registration should its operational or financial interests change. Conversely, a traditional part 47 registration of small unmanned aircraft can be moved to a new part 48

[18] The Task Force final report can be found in the docket for this rulemaking and at *https://www.faa.gov/uas/publications/media/RTFARCFinalReport_11-21-15.pdf.*

registration at the discretion of the owner if they wish to pursue that venue.

A. Applicability

1. Small Unmanned Aircraft

The registration requirements in part 48 apply to small unmanned aircraft that are part of a small unmanned aircraft system and that satisfy the requirements to register in § 48.15 and the eligibility requirements in § 48.20. Although a small unmanned aircraft itself is one component of an sUAS, part 48 requires the registration of the aircraft only.[19] The registration requirement is limited to the small unmanned aircraft for two reasons. First, the small unmanned aircraft is the only part of the UAS that satisfies the definition of ''aircraft'' for purposes of the registration requirements in 49 U.S.C. 44101–44103, and second, components that control the unmanned aircraft can be used to control multiple aircraft. As discussed in this document, the FAA would continue to exercise enforcement discretion for aircraft that weigh less than 0.55 pounds, such as paper airplanes that are not linked to a system.

Registration does not provide authorization to operate any aircraft—and the same is true for small unmanned aircraft. Currently, operations using small unmanned aircraft other than as model aircraft must obtain authorization to operate in accordance with section 333 of Public Law 112–95, or through issuance of a special airworthiness certificate. Small unmanned aircraft operated exclusively as model aircraft may only be operated in accordance with requirements of section 336 of Public Law 112–95 (Feb. 14, 2012). See also Interpretation of the Special Rule for Model Aircraft, 79 FR 36171 (June 25, 2014). Any operation that does not follow the 336 framework needs authorization from the FAA. Once the sUAS Operation and Certification NPRM is finalized, operations intending to use small unmanned aircraft as other than model aircraft, and those operators who choose not to operate in accordance with the requirements of section 336 of Public Law 112–95, will need to operate in accordance with the sUAS Operation and Certification rule's requirements.

[19] Sec. 331(9) of Public Law 112–95. Public Law 112–95 defines an ''unmanned aircraft system'' as ''an unmanned aircraft and associated elements (including communication links and the components that control the unmanned aircraft) that are required for the pilot in command to operate safely and efficiently in the national airspace system.''

2. Operations in U.S. Airspace

The registration process for small unmanned aircraft provided in part 48 may be used only if the aircraft is intended for use within the United States during the period of registration because this registration process is not intended to be consistent with International Civil Aviation Organization (ICAO) standards addressing registration and marking. The FAA notes that under Presidential Proclamation 5928, the territorial sea of the United States, and consequently its territorial airspace, extends to 12 nautical miles from the baselines of the United States determined in accordance with international law.

ICAO has stated that ''[u]nmanned aircraft . . . are, indeed aircraft; therefore existing [ICAO standards and recommended practices] SARPs apply to a very great extent. The complete integration of UAS at aerodromes and in the various airspace classes will, however, necessitate the development of UAS-specific SARPs to supplement those already existing.'' [20] ICAO has begun to issue and amend SARPs to specifically address UAS operations and registration. Regarding registration, ICAO standards in Annex 7 (Aircraft Nationality and Registration Marks) to the Convention require remotely piloted aircraft to ''carry an identification plate inscribed with at least its nationality or common mark and registration mark'' and be ''made of fireproof metal or other fireproof material of suitable physical properties.'' For remotely piloted aircraft, this identification plate must be ''secured in a prominent position near the main entrance or compartment or affixed conspicuously to the exterior of the aircraft if there is no main entrance or compartment.''

The FAA agrees with ICAO that unmanned aircraft are indeed aircraft and as such, must be registered and identified. However, the agency has determined that it is possible to register and identify small unmanned aircraft using in a less restrictive manner and with more flexibility than current ICAO standards allow. Additionally, the FAA has determined that it can achieve the highest level of compliance with a registration requirement and thus identify more small unmanned aircraft to their owners by using the streamlined, web-based process in this final rule.

The FAA emphasizes that utilization of the registration process implemented by this final rule does not prohibit small UAS operators from operating in international airspace or in other countries; however, the rule also does not provide authorization for such operations.

UAS operations that do not take place entirely within the United States will need to obtain the necessary authorizations from the FAA and the relevant foreign aviation authority.

[20] ICAO Circular 328 (Unmanned Aircraft Systems (UAS)) (2011).

3. Public Aircraft Operations

Clarification/Request for Information: Several commenters addressed the applicability of registration requirements to small unmanned aircraft used in public aircraft operations. The Department of Defense Policy Board on Federal Aviation recommended the FAA ''[c]learly state that all public aircraft operators with self-certification authority, by statute, are exempt from this registration.'' Aviation Management Associates also said the FAA should exempt all public aircraft from the registration requirement. Another commenter said that any UAS that are owned or operated by the FAA Small UAS Center of Excellence, any of the six FAA UAS Test Sites or any other government agency or department, or are operated under a Certificate of Waiver or Authorization (COA) should be exempt from the registration requirement. In contrast, a few individuals specifically recommended that UAS operated by government should be required to register.

IFR Requirement: Under 49 U.S.C. 44101, only certain foreign aircraft and aircraft of the national defense forces of the United States are eligible to operate unregistered aircraft in the United States, and any such unregistered aircraft must be identified in a way satisfactory to the Administrator. Section 44102(a)(2)(A) and (B) describe those aircraft that may be registered as those of the United States Government and various state and local governments. This definition parallels the language used in 49 U.S.C. 40102(a)(41) and 40125 to describe public aircraft eligibility and operations. Accordingly, consistent with existing statutory requirements for registration, the IFR will not apply to small unmanned aircraft of the armed forces of the United States. 49 U.S.C. 44101(b)(2). Small unmanned aircraft used in non-military public aircraft operations are subject to the registration requirements of 49 U.S.C. 44101 and as such, must complete the registration process provided in part 47. These aircraft may also be registered in accordance with the part 48 process that will be available for aircraft used for

other than model aircraft operations in the spring of 2016.

4. Trusts and Voting Trusts

The FAA requires that a person holding legal title to an aircraft in trust must, when applying to register that aircraft in the United States, submit a ''copy of each document legally affecting a relationship under the trust . . .'' 14 CFR 47.7(c)(2)(i). The purpose of this requirement is to ensure the FAA has access to all documents relevant to the trust relationship when determining whether a trust provides an adequate basis for registering an aircraft in accordance with FAA regulations. A fundamental part of the registration process for aircraft held in trust is determining whether the underlying agreements meet and are not in conflict with the applicable requirements and therefore are sufficient to establish the trustee's eligibility to register the aircraft. The analysis of voting trusts is similarly intricate.

Use of trusts and voting trusts involve complex relationships that have been used to obscure the identity of the beneficial owners of an aircraft. For this reason, part 47 applies a higher level of scrutiny when trusts and voting trusts seek to register aircraft. This higher level of scrutiny is inconsistent with the streamlined registration process established under part 48. Accordingly, trusts and voting trusts must continue to register small unmanned aircraft under part 47 so that the FAA can identify and evaluate the applicants.

B. Definitions

The new part created by this final rule includes definitions of several terms that are relevant to the registration of small unmanned aircraft. The definitions of ''U.S. Citizen,'' ''resident alien,'' and ''Registry'' have the same meaning as provided in the aircraft registration process provided by part 47. *See* § 47.2. The definition of ''model aircraft'' is identical to the definition provided in section 336(c) of Public Law 112–95.

Additionally, the agency finds it necessary to codify the statutory definitions of ''small unmanned aircraft,'' ''unmanned aircraft,'' and ''small unmanned aircraft system'' given the limited applicability of the new subpart to small unmanned aircraft that are an associated element of a small UAS. The agency proposed definitions of these three terms in the Operation and Certification NPRM. This rulemaking finalizes these proposed definitions because they are applicable to the small unmanned aircraft registration process provided by this final rule. The definitions will be added to § 1.1 General definitions, because the agency expects them to be applicable to several parts throughout title 14.

1. Unmanned Aircraft

In the sUAS Operation and Certification NPRM, the FAA proposed to define ''unmanned aircraft'' as ''an aircraft operated without the possibility of direct human intervention from within or on the aircraft.'' [21] This proposed definition would codify the statutory definition of ''unmanned aircraft'' specified in Public Law 112–95.[22]

The Management Association for Private Photogrammetric Surveyors (MAPPS) stated that the definition of ''unmanned aircraft'' needs to be clarified because the current definition leaves open the possibility that paper airplanes, model airplanes, model rockets, and toys could be considered unmanned aircraft. The Aviators Model Code of Conduct Initiative stated that this definition and the definition of small unmanned aircraft may permit infant passengers and asked the FAA to amend the definition to categorically prohibit the carriage of passengers on an unmanned aircraft.

Lastly, an individual said that because 14 CFR 1.1 defines aircraft as ''a device that is used or intended to be used for flight in the air,'' only a ''whole'' or ''complete'' aircraft can meet this definition for registration purposes.

The definition of unmanned aircraft as ''an aircraft operated without the possibility of direct human intervention from within or on the aircraft'' is a statutory definition, and as such, this rule will finalize that definition as proposed.[23]

2. Small Unmanned Aircraft

In the sUAS Operation and Certification NPRM, the FAA proposed to define ''small unmanned aircraft'' as ''an unmanned aircraft weighing less than 55 pounds including everything that is on board the aircraft.'' [24] The NPRM noted that Public Law 112–95 defines a small unmanned aircraft as ''an unmanned aircraft weighing less than 55 pounds.'' [25] However, the NPRM pointed out that this statutory definition does not specify whether the 55-pound weight limit refers to the total weight of the aircraft at the time of takeoff (which would encompass the weight of the aircraft and any payload on board) or simply the weight of an empty aircraft.[26] The NPRM proposed to define small unmanned aircraft using total takeoff weight because: (1) Heavier aircraft generally pose greater amounts of public risk in the event of an accident as they can do more damage to people and property on the ground; and (2) this approach would be similar to the approach that the FAA has taken with other aircraft, such as large aircraft, light-sport aircraft, and small aircraft.[27]

Commenters including the Aircraft Owners and Pilots Association (AOPA), Air Line Pilots Association (ALPA), Helicopter Association International (HAI), the Small UAV Coalition, the News Media Coalition, and the Professional Photographers of America, expressed support for the proposed definition. The New England Chapter of the Association of Unmanned Vehicles International supported the weight limitation as a reasonable starting point, but pointed out that there are commercial applications being developed that will need to exceed 55 pounds. Event 38 Unmanned Systems, Inc. stated that, rather than segregate small unmanned aircraft by total weight, FAA should use a ''kinetic energy split'' that combines weight and speed.

Several commenters asked that the 55-pound weight limit be lowered. Event 38 Unmanned Systems recommended an initial weight restriction of 10 pounds, with adjustments based on subsequent research. Prioria Robotics stated that the weight limitation for small unmanned aircraft should be less than 25 pounds, and that the definition should include a requirement that the aircraft be ''hand-launchable.'' An individual commenter asked for the weight limit to be reduced to 33 pounds.

Green Vegans stated that FAA must provide test data on the collision impact of a 55 pound UAS, traveling at various speeds, on both humans and birds. The advocacy group argued that the public cannot make informed comments on the proposed weight limitation without such data. The commenter also noted that such data would be provided by a National Environmental Protection Act Environmental Impact Statement, which the group stated FAA must do. Crew Systems similarly opposed the maximum weight limitation, arguing that FAA provided no justification for it. The company asserted that a 55 pound limit is large enough to be hazardous when operating in an urban environment, even if care is taken. Although it did not expressly object to

[21] 80 FR at 9586.

[22] 80 FR at 9556 (citing Pub. L. 112–95, section 331(8)).

[23] Pub. L. 112–95, section 331(8).

[24] 80 FR at 9586.

[25] 80 FR at 9556 (citing Pub. L. 112–95, section 331(6)).

[26] 80 FR at 9556.

[27] 80 FR at 9556.

the weight limitation, the United States Ultralight Association (UASA) also expressed concern about the significant damage that a 50-plus pound unmanned aircraft could do to light, open cockpit aircraft.

Other commenters asked the FAA to increase the 55-pound weight limit. Consumers Energy Company objected to the definition's proposed weight limitation as too light, arguing that a 55-pound weight restriction will negatively impact small UAS flight times and the usage of alternative fuel sources. The company urged FAA to consider fuel loads and to increase the weight restriction to 120 pounds. The company noted that, if FAA has concerns about safety, it could create subcategories under which maximum weight restriction is imposed on the fuel load, rather than adopt a blanket weight restriction. Several individual commenters also suggested higher weight limits, including: 80 pounds; a range of 30–100 pounds; and 150 pounds. Another individual commenter called the weight restriction ''arbitrary,'' and noted that other countries have defined small UAS up to 150 kg.

An individual commenter suggested that the FAA amend the definition of small unmanned aircraft to include aircraft weighing exactly 55 pounds. Another individual commenter stated that the definition of ''small unmanned aircraft'' must be clarified to account for different types of UAS (*e.g.,* fixed-wing, rotor-wing, small, medium, large).

The definition of ''small unmanned aircraft'' is a statutory definition. Specifically, Public Law 112–95 defines a small unmanned aircraft as ''an unmanned aircraft weighing less than 55 pounds.'' [28] Accordingly, this rule will retain the statutory definition, which includes 55 pounds as the weight limit for a small unmanned aircraft.

However, as the FAA pointed out in the sUAS Operation and Certification NPRM, the statutory definition contains an ambiguity with regard to how the 55-pound weight limit should be calculated. The Small UAV Coalition and Federal Airways & Airspace supported the inclusion of payload in the 55-pound weight limit. Conversely, DJI, the Associated General Contractors of America, and an individual commenter questioned whether the 55-pound weight limitation should include payload that is carried by the small unmanned aircraft. DJI argued that the FAA does not consider the weight of payload in its regulations governing the operation of ultralights. Kapture Digital Media stated that the total weight limit of a small UAS should not include the weight of the battery.

As noted in the sUAS Operation and Certification NPRM, the FAA uses total takeoff weight for multiple different types of aircraft, including large aircraft, light-sport aircraft, and small aircraft.[29] One of the reasons that the FAA uses total takeoff weight in all of these regulations is because, in the event of a crash, a heavier aircraft can do more damage to people and property on the ground than a lighter aircraft. In evaluating this type of risk for a small UAS, it is the total mass of the small unmanned aircraft that is important; the manner in which that mass is achieved is irrelevant. In other words, a 50-pound unmanned aircraft carrying 30 pounds of payload does not pose a smaller risk than an 80-pound unmanned aircraft that is not carrying any payload. As such, this rule will retain the proposed inclusion of everything onboard the aircraft in the 55-pound weight limit of a small unmanned aircraft.

The General Aviation Manufacturers Association (GAMA) pointed out that, although FAA typically points to Maximum Takeoff Weight when identifying an aircraft's weight and associated mass, the proposed definition of the small UAS does not include the term ''takeoff.'' As such, the commenter recommended FAA modify the definition to reference the point of takeoff as follows: ''Small unmanned aircraft means an unmanned aircraft weighing less than 55 pounds including everything that is on board the aircraft on takeoff.'' An individual commenter stated that the choice of ''on board'' in the definition of ''small unmanned aircraft'' will create confusion, because these aircraft routinely have ''attached'' external payloads because there is little room for internal ''on board'' payloads.

The FAA agrees with these comments and has modified the proposed definition to refer to the total aircraft weight at takeoff and to include possible external attachments to the aircraft in the calculation of small unmanned aircraft weight. Accordingly, as provided in § 1.1, small unmanned aircraft means an unmanned aircraft weighing less than 55 pounds on takeoff, including everything that is on board or otherwise attached to the aircraft. If the unmanned aircraft is tethered by the cable in such a way that the cable, securely attached to an immoveable object, prevents the unmanned aircraft from flying away in the event of loss of positive control, only the portion of the cable which may be lift aloft by the small unmanned aircraft must be added to the weight of the unmanned aircraft when determining total weight.

3. Small Unmanned Aircraft System (Small UAS)

Finally, the sUAS Operation and Certification NPRM proposed a definition of ''small unmanned aircraft system (small UAS)'' as ''a small unmanned aircraft and its associated elements (including communication links and the components that control the small unmanned aircraft) that are required for the safe and efficient operation of the small unmanned aircraft in the national airspace system.'' [30] The NPRM explained that, with one exception, this proposed definition would be similar to the statutory definition of UAS specified in Public Law 112–95.[31] The difference between the two definitions is that the proposed definition of small UAS did not refer to a ''pilot in command,'' as that position did not exist under the NPRM.[32]

AirShip Technologies supported the proposed definition. Conversely, Transport Canada asked the FAA to consider whether it would be better to use the ICAO terminology of remotely-piloted aircraft system (RPAS) instead of small UAS. Foxtrot Consulting stated that the inclusion of the phrase ''associated elements (including communications links and the components that control the small unmanned aircraft)'' in the definition of small UAS creates a ''regulatory nightmare,'' because it means cellular network providers and their infrastructure are considered part of a small UAS. The commenter pointed out that small UAS can be controlled via Wi-Fi and cellular networks, which opens enormous capabilities to small UAS operations. The commenter went on, however, to question whether, as a result of the proposed definition, a cellular provider is liable if a UAS being controlled through their network causes damage to property, serious injury, or death.

The proposed definition of small UAS is derived from the statutory definition of ''unmanned aircraft system'' in Public Law 112–95.[33] As such, this rule will codify the proposed definition.

Because Congress has selected the term ''unmanned aircraft system'' to

[28] Pub. L. 112–95, section 331(6).

[29] *See* 14 CFR 1.1 (referring to ''takeoff weight'' for large, light-sport, and small aircraft in the definitions for those aircraft).

[30] 80 FR at 9586.

[31] 80 FR at 9556 (citing Pub. L. 112–95, section 331(9)).

[32] 80 FR at 9556.

[33] Pub. L. 112–95, section 331(9).

describe this type of a system, the FAA may not use a different term, such as RPAS, in this rule. In response to Foxtrot Consulting, the FAA notes that the requirements of this rule apply only to the sUAS operator, the owner of the small UAS, and people who may be involved in the operation of the small UAS. As such, a cellular provider would not be in violation of proposed part 107 when their involvement in a small UAS operation is limited to the operator's use of the provider's infrastructure. Additionally, the FAA does not opine on liability issues that are beyond the scope of this rule such as whether the provider may be liable to the sUAS operator or third parties under tort or contract law.

The NextGen Air Transportation Program at North Carolina State University and one individual commenter recommended FAA specifically state that tethered powered small UAS are considered small UAS under proposed part 107. In response to these comments, the FAA notes that the definition of small UAS in this rule includes tethered powered small UAS.

4. Model Aircraft

This rulemaking includes the definition of the term ''model aircraft'' as it appears in section 336 of Public Law 112–95. Thus, in this IFR, ''model aircraft'' means an unmanned aircraft that is (1) capable of sustained flight in the atmosphere; (2) flown within visual line of sight of the person operating the aircraft; and (3) flown for hobby or recreational purposes.

C. Exclusion From the Requirement to Register

Clarification/Request for Information: The DOT and the FAA posed the following question in the October 22, 2015 Clarification/Request for Information document (80 FR at 63914):

> Consistent with past practice of discretion, should certain UAS be excluded from registration based on performance capabilities or other characteristics that could be associated with safety risk, such as weight, speed, altitude operating limitations, duration of flight? If so, please submit information or data to help support the suggestions, and whether any other criteria should be considered.

The agency received many comments responding to this inquiry. A few commenters said this question is premature because there is insufficient data available to determine what, if any, safety risk is posed by various categories of UAS. One individual commenter said this question should not be asked until after there are ''thorough, independent studies available showing the effects of different hobby aircraft on the national airspace and potential interference with full scale aviation.'' The commenter further stated that once the results of that research are available, the public should have an opportunity to comment on them. Another individual said the FAA cannot make a determination about exclusions from the registration requirement until testing is conducted to see what the actual damage would be to buildings, cars, people, and manned aircraft from UAS of different sizes.

No unmanned aircraft should be excluded from the requirement of registration: Some commenters said that all unmanned aircraft should be registered. One individual commenter, for example, asserted that if the intent of registration is to have the ability to identify the operator of a UAS, then there is no logical reason to base the requirement to register on factors such as the speed, performance, capability, or size of a UAS. Another individual commenter said all unmanned aircraft should be registered because unmanned aircraft of any size or weight could pose a safety threat to manned aircraft (including, for example, helicopters on emergency or rescue missions that operate at all altitudes and from areas other than certificated airports). Chronicled, Inc. said that if the registration procedure is ''efficient and seamless'' then it should include all unmanned aircraft.

The National Association of Broadcasters asserted that UAS registration is a reasonable step to mitigate the dangers posed by a small minority of hobbyist UAS operators that are flying in a careless and reckless manner that endangers the public. The City of Arlington (Texas) Police Department stated that ''the increasing popularity of the recreational use of UAS by model aircraft operators has presented significant public safety and regulatory challenges in Arlington and our nation's cities,'' and strongly urged the FAA to require the registration of all UAS systems. The Air Medical Operators Association stated that all UAS capable of entering the NAS and conflicting with manned aircraft in flight should be considered aircraft and be subject to the registration requirement.

The Colorado Agricultural Aviation Association (CoAAA) supported its position that all UAS need to be registered by pointing out that low altitude airspace is already being shared by manned and unmanned flight operations ''without any definitive safety protocols beyond operate in a safe manner and yield to manned aircraft.'' As the number of unmanned aircraft using the airspace increases, the commenter continued, so does the potential for a mid-air collision which could lead to loss of the aircraft, injuries, or death. CoAAA and the National Agricultural Aviation Association (NAAA) further supported their positions that there should be no exemption for light-weight UAS by pointing to bird-strike data from a joint report by the FAA and the USDA. Comparing the dangers associated with collisions between wildlife and civil aircraft to the dangers associated with collisions between light-weight UAS and civil aircraft, the commenters asserted that it does not take a very large bird to do significant damage to an airplane. By way of example, CoAAA noted that mallard ducks (which weigh between 1.6 and 3.5 pounds) and turkey vultures (which weigh between 1.8 to 5.1 pounds) can break through the windshield of aircraft used for agricultural purposes.

The Electronic Privacy Information Center (EPIC) also opposed an exemption from the registration requirement for any UAS that operates in the NAS. EPIC stated that the size of a UAS is not strictly indicative of the privacy risks it poses and, in fact, that smaller UAS can more easily conduct ''surreptitious surveillance on unsuspecting individuals.''

Modovolate Aviation, LLC and a number of individual commenters recommended a limited exemption for unmanned aircraft that are operated exclusively indoors.

All model aircraft should be excluded from the requirement of registration: A large number of commenters recommended an exemption from the registration requirement for model aircraft. These commenters included many individual members of the Academy of Model Aeronautics (AMA), as well as other members of the recreational/hobby community. Among the reasons given by commenters for this position were the facts that traditional model aircraft have a long history of safe operations and that the FAA is not authorized to regulate model aircraft. The Aerospace Industries Association said the exemption of ''hobby platforms'' from registration would enhance the viability of the registration process by allowing the focus of the registry to remain on ''commercial use platforms.''

With respect to which aircraft would qualify as ''model aircraft'' for the purposes of an exemption from the registration requirement, some commenters said that any model aircraft flown recreationally should be exempt. One individual commenter asserted that

other countries, such as Australia, Canada and the United Kingdom have made this distinction between recreational and commercial use and not required registration of recreational use aircraft. The Minnesota Department of Transportation also stated that it has not required UAS operated solely for recreational use to register. Many other commenters specifically stated that any model aircraft operated within the safety programming of the AMA should be considered ''model aircraft'' and not ''UAS'' and therefore exempt from the registration requirement. A large number of those commenters asserted that the AMA has ''an impeccable 80-year track record of operating safely,'' and that requiring AMA members to register their aircraft will have no impact on that safety record. Several commenters recommended that the FAA require model aircraft operators to become AMA members. Some other commenters said that any model aircraft that meets the definition of model aircraft contained in the FAA Modernization and Reform Act of 2012 should be exempt from the registration requirement.

A number of individual commenters highlighted the distinction between traditional model aircraft that are home built or assembled from kits (which they characterized as separate from UAS) and Ready to Fly (RTF) aircraft that do not require assembly (which they characterized as UAS). These commenters claimed that traditional model aircraft do not pose a safety risk to the NAS because they are flown strictly within the operator's visual line of sight, have no autonomous control, and have fairly limited ranges. Some commenters also pointed out that model aircraft that are operated within the auspices of the AMA can only be flown at AMA-sanctioned fields and must already display the owner's AMA member ID. Commenters contrasted these models with ready-to-fly aircraft, which are easy to operate, capable of vertical take-off, payload carrying and flying autonomously and beyond visual line of sight, and are often equipped with other enhanced capabilities, such as cameras, GPS systems, and remote viewing electronics. Commenters asserted that the problems that have prompted the FAA to require registration are due to the proliferation of these ready-to-fly aircraft that can be flown beyond visual line of sight. One commenter said ''their ease of use, intuitive controls, and overall availability have created a perfect storm, wherein inexperienced flyers are flying in inappropriate and/or dangerous places.''

Some commenters recommended a blanket exemption for home-built model aircraft. One commenter explained that home-built models should be exempt from registration because individuals who build their own model aircraft ''have the time, experience, personal investment and motivation to be aware of and observe safe modeling practices.'' Another commenter asserted that exempting home- or scratch-built model aircraft ''will allow experimenters, programmers, developers and beta testers to exercise their creativity without complicating or impeding the creative process with unnecessary restrictions.'' Other commenters did not request a blanket exemption for home-built model aircraft but instead recommended exemptions based on performance capabilities, which would necessarily exclude traditional model aircraft. Those recommendations are discussed below.

Unmanned aircraft under a certain weight should be excluded from the requirement of registration: Many commenters recommended that the FAA create an exemption from the registration requirement for UAS that fall below a minimum weight threshold. One individual commenter said the FAA needs to collect some real data to determine the weight below which unmanned aircraft no longer pose a threat to people or manned aircraft. Another individual commenter stated any weight threshold chosen for exemption needs to be determined based on kinetic energy and lethality studies. Other commenters made both general and specific recommendations for a minimum weight threshold.

Some individuals based their recommendations on a comparison between the risks to manned aircraft from bird strikes and the risks from collisions with unmanned aircraft. One commenter said that any aircraft over the weight of a mallard duck should be registered. Another commenter recommended an exemption for UAS ''which present a risk equivalent or less than an acceptable bird strike.'' Another commenter recommended an exemption for UAS that weigh less than 1.5 times the heaviest flying bird's weight. Another commenter noted that the FAA has regulations that define the requirements for aircraft to withstand impact from birds (14 CFR 25.631) and engine ingestion from birds (14 CFR 33.76), and recommended the FAA exempt any unmanned aircraft that would have equal or less impact than a bird with the characteristics described in those existing regulations. Another individual commenter said a threshold weight of 2 pounds is ''entirely reasonable'' because crows weigh between 0.7 and 2.6 pounds. Another commenter stated that a weight threshold of 1 kilogram (or 2.2 pounds) is appropriate because it represents a small risk factor based on an FAA wildlife strike report that says ''species with body masses < 1 kilogram (2.2 lbs) are excluded from database.'' [34] Another individual commenter asserted that a weight threshold of 5 pounds is appropriate because damage is likely to be minimal in an emergency event and because manned aircraft already must have the ability to withstand a similar bird strike.

Some commenters based their recommendations on the weight threshold proposed by the FAA in the sUAS Operation and Certification NPRM for a possible micro UAS classification.[35] The News Media Coalition said that if the FAA adopts special rules for micro UAS, then those micro UAS should be exempt from the registration requirement. Aviation Management Associates, Inc. similarly stated that the weight threshold for registration should be 4.4 pounds—the weight proposed in the sUAS Operation and Certification NPRM—''or lesser weight if it is determined vehicles of less than 4.4 pounds create an unacceptable safety risk.'' Aviation Management qualified its recommendation, however, by asserting that no UAS that weighs less than 1.5 pounds should be required to register. A few individual commenters also stated that the weight threshold for registration should be in line with the weight threshold chosen for a micro UAS classification.

The Agricultural Technology Alliance (ATA) asserted that if the FAA issues a blanket exemption from the registration requirement for all micro UAS registration, it can better focus its efforts on higher-risk UAS without compromising safety. ATA also noted that Canada has a similar exemption for micro UAS.

A number of commenters, including Aviation Management Associates, Inc., the National Retail Federation and numerous individuals, asserted that the FAA should exempt UAS that fit into the ''toy'' category. Many of those

[34] Wildlife Strikes to Civil Aircraft in the United States 1990–2014 (July 2015), *available at http://www.faa.gov/airports/airport_safety/wildlife/media/Wildlife-Strike-Report-1990-2014.pdf.*

[35] The sUAS Operation and Certification NPRM considered the creation of a micro UAS classification for UAS weighing no more than 4.4 pounds (2 kilograms) for purposes of operation and certification requirements. 80 FR at 9556–9558.

commenters did not suggest a minimum weight threshold for a toy category. Several individual commenters suggested the FAA use the AMA's guidelines for the Park Flyer Program (*i.e.,* aircraft weighing 2 pounds or less) to define what qualifies as a ''toy'' for purposes of this exclusion.

The Toy Industry Association said that for purposes of defining products that should be exempt from the registration requirement, it is not necessary to create an independent ''toy UAS'' category that is separate from the category of unmanned aircraft that should be exempt from registration requirements ''due to their lower risk.'' Specifically, the association discouraged the FAA from creating a ''toy'' category based on factors unrelated to operational safety, such as cost of the UAS, how it is marketed, or where it is sold, and encouraged the agency to ''instead look at targeted UAS performance indicators that directly speak to the operational risk of the product and exempt all UAS that fit in that category.'' The Toy Industry Association highlighted the weight of the UAS as ''the most risk-related and measurable variable.'' The commenter noted that most of its members manufacture UAS that are below 1 kilogram, but that certain UAS that weigh more than 1 kilogram should also be considered for exemption (*i.e.,* products intended to be flown indoors, products than can only fly relatively low, and products that are equipped with technology that makes the product safer, such as crash avoidance technology or technology that limits the height the UAS can fly).

Prox Dynamics stated that smaller and lighter air vehicles generally display less risk than larger ones. The company asserted, for example, that ''a fly-sized low energy drone has negligible risk, even if a direct impact is considered.'' The company further asserted that a class of ''inherently safe'' aircraft exists that should be exempt from the registration requirement. Specifically, the company recommended an exemption for aircraft with a maximum weight of less than 60 grams. A few individual commenters suggested 3.3 pounds because that weight is used as a threshold for regulating model rockets. Horizon Hobby recommended that products with a gross weight of less than 2 kilograms be exempt from the registration requirement, which the commenter asserted is in line with current FAA-approved exemption for hobby uses. An individual commenter stated that rules already exists for other unmanned objects operating in the NAS, including kites, balloons and rockets (14 CFR part 101), and that the FAA should follow the precedent set by those rules and only regulate UAS heavier than 4 to 6 pounds. Other commenters also recommended specific weight thresholds for exemption from the registration requirement ranging from 60 grams on the low end to 100–150 pounds on the high end.

A few individual commenters framed their proposals in terms of payload weight. One commenter recommended an exemption for unmanned aircraft that are not capable of carrying a payload of more than 1 or 2 pounds. Another commenter recommended that registration be required for unmanned aircraft that are capable of carrying more than 10 pounds of payload. Another commenter said registration be required for any unmanned aircraft that weighs more than 8 or 10 pounds and can carry a load of its weight or higher. An individual commenter asserted that even small, relatively light-weight models have dangerous rotors and can carry a risk of doing damage if they collide with, or are ingested into the engine of, a full-scale aircraft. This commenter further asserted that technology is advancing to enable a single control station to operate multiple UAS in a coordinate way, and a ''swarm'' of otherwise light-weight UAS would be dangerous if flown into the path of a full-scale aircraft.

Some commenters recommended minimum weight thresholds for specific types of UAS. A number of commenters, for example, said model aircraft that do not operate within existing AMA rules should be above 5 pounds to trigger the registration requirement. Another individual commenter said that only model aircraft that are one-half scale or larger should be subject to registration. One individual commenter recommended a 1 kilogram (2.2 pound) threshold for multicopters. The commenter noted that this threshold is commonly used in Europe and the United Kingdom. Another individual commenter recommended a weight threshold of 25 pounds for fixed-wing UAS and 10 pounds for non-fixed-wing UAS. One individual commenter recommended an exemption for quadcopters under 1,500 grams, while another individual commenter recommended an exemption for quadcopters under 20 pounds. One individual commenter recommended an exemption for ''toy'' unmanned aircraft that are 1 pound or less and registration only if used above 300 feet for ''mini'' UAS weighing between 1 and 7 pounds. A few commenters recommended an exemption for small unmanned aircraft that are made out of foam, although the individual did not specify a weight threshold for these aircraft.

Unmanned aircraft with certain performance capabilities should be excluded from the requirement of registration: A large number of individual commenters recommended that the registration requirement apply only to UAS that possess certain performance capabilities or aircraft specifications. Many of those commenters, including individuals who submitted comments as part of an AMA form letter campaign, said the registration requirement should apply only to unmanned aircraft that have the ability to operate beyond the operator's visual line of sight. Other commenters, including Aviation Management Associates, Inc. and numerous individuals, also said that unmanned aircraft that are capable of beyond visual line of sight operations should be registered, but those commenters did not say that such unmanned aircraft are the only small unmanned aircraft that should be registered.

In addition to the ability to operate beyond visual line of sight, commenters recommended that the registration requirement apply only to unmanned aircraft that have one or more of the following performance capabilities:

Have the ability to fly autonomously.
Have automated control functions such as ''return-to-home.''
Have RNAV capabilities (either through satellite base navigation or through inertial navigation).
Have first person view capabilities.
Have an onboard navigational system.
Are equipped with GPS.
Take off vertically.
Are capable of hovering.
Are capable of hovering during normal operation and are equipped with onboard photo or video recording equipment.
Are capable of automated or remote-controlled pickup or drop-off of a payload.
Are equipped with an onboard camera or audio recording equipment.
Can transmit a video signal at more than ¼ mile.
Are capable of flight for longer than a specified minimum period of time.
Have a range that exceeds a specified minimum distance. One commenter characterized this as ''electronic line of site.''
Have the ability to fly above a specified minimum altitude.
Are capable of entering controlled or restricted airspace.

Some commenters suggested some minimum weight threshold in combination with one or more of the above-listed capabilities.

A group of academics recommended the FAA adopt a progressive approach that requires registration for only the most problematic technologies—which

they asserted to be long-range first person view and GPS waypoint navigation—and then ''transparently assess'' the results of this registration. These commenters noted that if the FAA determines that conventional model aircraft are still creating an undue hazard for aviation, then additional measures (such as a requirement for low-cost pressure altimeters that limit model aircraft below 400 feet) could be implemented.

The Aerospace Industries Association said that only aircraft capable of sustained, untethered flight should be registered. A few individual commenters similarly recommended exemptions for aircraft that are control-line operated (*i.e.*, tethered flight), that are hand-thrown or rubber-band powered (*i.e.*, ''free flight'' aircraft), and that are unpowered (*e.g.*, gliders).

Several members of the ''free flight'' community specifically recommended that the FAA create an exemption for light-weight, free flight model aircraft that weigh 10 ounces or less and have no means of externally controlling their aircraft while in flight.

Another individual similarly asserted that speed, altitude, and flight duration will depend on battery, motor, and propeller size, and that weight should therefore be used to determine which UAS should be exempt from the registration requirement. The commenter noted that consideration of factors such as speed, altitude, and flight duration raises the question of what defines the actual UAS (*e.g.*, the fuselage for a plane, the frame of a quadcopter). The commenter further noted that the same fuselage can have dramatically different performance characteristics if the battery, motor, or propeller is changed. The commenter asserted that registering each combination ''would be absurd,'' and any change in propeller, motor, or battery size would raise questions of when an owner needs to re-register the aircraft.

There were commenters, however, who disagreed with a requirement to register UAS that possess some of the above-listed capabilities. An individual commenter, for example, said that enhanced capabilities such as first person view or flight controls capable of autonomous flight should not be a reason for requiring registration. The commenter claimed that an aircraft that does not exceed safe mass/speed/altitude/duration thresholds is not automatically a threat to manned aircraft simply by virtue of being equipped with enhanced capabilities. Another individual commenter said that small UAS equipped with GPS should not automatically be required to register because some small UAS flown by beginners use GPS to stabilize the aircraft, which increases their safety level. The commenter noted that these UAS have controls that will not let the aircraft fly above a certain altitude. Several commenters said that any requirement to register all UAS that have the ability to fly above a certain altitude or to enter controlled airspace should exclude UAS that are programmed with geofencing or ''Safe Fly'' technology, which limits altitude and restricts flight into controlled airspace. The Toy Industry Association cautioned against using altitude as a threshold for registration. The commenter noted that not all companies use technology that limits the height a UAS can fly and that it would be premature to spell out specific technological requirement to ensure that UAS fly below a certain altitude when other technology advancements may develop that achieve the same purpose. The Toy Industry Association also asserted that the issue of whether a UAS is equipped with a camera is not relevant to registration. The association stated that, while there are legitimate privacy concerns to consider, ''this conversation should not take place in the context of the aviation industry safety at this time.''

The National Retail Federation said that unmanned aircraft ''that are designated as 'toys' with limited performance capabilities'' should be exempt from the registration process. The commenter did not, however, specify what qualifies as ''toys,'' or what performance capabilities would remove an unmanned aircraft from the ''toy'' category. Rather, the commenter said the FAA should require registration based on potential safety and security risks associated with performance capabilities or material specifications of the unmanned aircraft, or the age of the operator.

Some commenters stated more generally that aircraft capabilities should not be a consideration for exemption from registration. One individual said speed, altitude, and flight duration should not be criteria for registration because they can vary depending on a wide-variety of ''user-selectable UAS components'' such as props choice, battery size, and flight mode, among others. Another individual said that because unmanned aircraft are constantly changing and evolving, it would be a poor choice to develop limitations based on performance. Several other individuals stated that registration should only be required if the operator intends to operate in the same airspace as manned aircraft. A few other individuals said all UAS flown in public spaces should be registered, regardless of aircraft capabilities. Another individual said capabilities of the aircraft have nothing to do with whether it is a safety risk or not; rather, it is the practices of the pilot that determine the safety risk.

Unmanned aircraft should be excluded based on operations conducted: Some commenters said that unmanned aircraft should be excluded from the registration requirement based on operations, rather than weight or aircraft specifications and capabilities. Modovolate Aviation, LLC and a number of individual commenters recommended a limited exemption for UAS that are operated exclusively indoors. As noted above, many commenters said that small UAS that are operated within the operator's visual line of sight, or below a minimum altitude, or below a certain speed, should be exempt from the registration requirement. Also noted above, some individual commenters recommended an exemption from the registration requirement for UAS that are flown under AMA safety guidelines on AMA-sanctioned flying fields. A few other individual commenters recommended an exemption for UAS that are operated, with permission, over private property. Another individual commenter recommended an exemption for UAS engaged in semi-commercial/agricultural operations that are conducted under 500 feet above ground level and over sparely populated areas. Another individual commenter recommended an exemption for UAS flying over ''largely unpopulated areas.'' Several individual commenters said the registration requirement should not apply to UAS that are used at schools and institutions for educational purposes. Another individual commenter recommended an exemption for UAS used for non-profit purposes.

The US Drone Racing Association said that drones used for racing—which generally stay under 100 feet and within visual line of sight—should not be required to register, unless their operations exceed some minimum operational thresholds such as beyond visual line of sight, range over half mile, or above 400 feet.

An individual commenter noted that, due to radio restrictions for video transmissions, first person view pilots are required by law to have a Federal Communications Commission (FCC) license for any transmitter over 25mW. Because those pilots are already required to register and place identifying markings on the transmitter,

the commenter recommended an exemption from the FAA registration requirement for a first person view pilot with an FCC license.

Other commenters phrased their recommendations in terms of UAS operations that should be included in the registration requirement. A number of commenters, including Aviation Management Associates, Inc. and many individuals, said any UAS used for commercial purposes should be registered. Several individual commenters said UAS operated in controlled airspace should be required to register. Another individual commenter said registration should be required for UAS that operate over private property, at altitudes over 400 feet, over populated areas, and within 5 miles of an airport.

Other comments on whether certain UAS should be excluded from the registration requirement: Some commenters recommended registration requirements based on aircraft type. Several individuals said that all fixed-wing UAS should be exempt from registration. A few other individuals said that only multirotor UAS should be required to register (because they are easy to fly and can take off from anywhere). Other categories of UAS that commenters said should be included in the registration requirements were high-volume production aircraft (*i.e.*, models produced in volumes greater than a specified value, such as 5,000 or 10,000 units per year) and UAS powered by gas/oil mixes. Some commenters suggested that UAS be excluded from the registration requirement based on frame size or prop size.

A number of commenters recommended a combination of factors to consider when determining what, if any, category of UAS should be excluded from the registration requirement.

Aviation Management Associates, Inc., said the FAA should exempt ''any small UAS regardless of weight that is limited by manufacturing firmware or other acceptable means to operating below 500 feet above ground level, will not exceed a ½ range mile from the operator and the associated ground control station, as well as provides geo-fencing and altitude limitations that meets FAA exclusionary airspace.''

The Property Drone Consortium stated that micro-drones of some maximum weight, speed, and altitude should be exempt from registration. The commenter suggested the following possible thresholds: Weight under 1 pound, 15–20 mph maximum flight speed, and an altitude of under 100 feet. The commenter also stated that an assessment could be made based on joules of imparted energy. The commenter further stated that region of operation should also be a point of consideration for a possible exemption from the registration requirement.

The Retail Industry Leaders Association said the FAA should adopt a risk-based approach and only require registration of UAS that present the greatest safety risks, based on consideration of factors including: Product weight and overall size, operating range, maximum speed, maximum altitude, fragility, and GPS and other navigation capability. Travelers Insurance Company similarly asserted that any unmanned aircraft that the FAA determines poses a risk to the national airspace or causes serious bodily injury or property damage should be registered. The commenter went on to say that the FAA should exercise discretion with respect to unmanned aircraft ''that are so light in weight and lacking in capabilities so as to pose no meaningful threat to persons, property or the national airspace.'' The commenter did not, however, specify what weight or what limited capabilities should be used as a threshold for registration.

Latitude Engineering, LLC asserted that ''there exists a threshold of mass and speed under which the risk associated with the flight of an unregistered commercial UAS is more than offset by the value returned to the public.'' The company stated that it reached this conclusion after evaluating the kinetic energy of various UAS airframe configurations from first principals and drawing from studies such as ''UAS Safety Analysis'' by Exponent (Dec. 16, 2014). The company's specific recommendation was to exempt UAS that are near the following values: Mass of an upper limit of 1 pound, speed limited to 50 knots, and altitude limited to 200 feet above ground level or 100 feet from the highest obstacle within 200 lateral feet. The company also asserted that no unregulated flights should be allowed within 5 miles of an airport.

Delair-Tech asserted that it would make sense for a category of unmanned aircraft associated with a low risk of accidental damage to be exempt from registration. The company defined this category as unmanned aircraft that weigh less than 1 kilogram and have a flight performance that is limited to 50 meters in height. The company based its recommendation on the ''toys and mini-drones'' category defined by the European Aviation Safety Agency in Ref 5, Proposal 14.

ATA stated that the FAA should exempt from the registration requirement any UAS that is to be used solely in rural areas, which the commenter said should be defined as a certain distance from an airport or a major population center. ATA noted that Canada also has an exemption for operations in low-risk rural areas.

EPIC noted that the registration scheme, as currently envisioned, does little to solve the problem of identifying a UAS or UAS operator because the only UAS that will be identifiable are those that are recovered after a crash. EPIC also noted that the current registration plan does nothing to inform the public of surveillance capabilities of the drone, which is necessary to make UAS operators accountable to the public.

Another individual said the important criteria for a registration determination are wingspan dimensions, propeller diameter and type, energy source, and weight. Another individual stated that exemptions should be based on weight, speed, and operating height. This commenter suggested the FAA use a formula to calculate a UAS's impact energy, where ''E'' is the impact energy, ''m'' is the mass, ''v'' is the maximum flight speed, ''g'' is gravitational acceleration (constant), and ''h'' is the height. This commenter stated that FAA could conduct a comprehensive study to determine the critical value of impact energy, and users could calculate the impact energy of their UAS, simply by filling the mass, maximum flights speed, and maximum height into an online formula available on the FAA Web site. Another individual said most ''hobby class UAS'' should be excluded from registration based on the empty weight of the aircraft and the potential kinetic energy of the unit. This commenter asserted that there is precedent for this method and that it has worked reasonably well with part 103 ultralight vehicles and light sport aircraft. This commenter claimed that a 55-pound model aircraft flown at 60 mph has around 12% of the kinetic energy of a part 103 vehicle traveling at the same speed, even with a payload of 40% of the empty weight. This commenter further claimed that a typical motorcycle driven at 40 mph would have nearly 4 times the kinetic energy of a 55-pound UAS flying at 60 mph. This commenter asserted that society accepts this level of risk for pedestrians, and questioned why one-quarter of that level of risk posed by an out-of-control UAS would also not be acceptable.

Task Force Recommendation: The Task Force accepted as a baseline that the registration requirement will only apply to small unmanned aircraft (*i.e.*,

aircraft weighing less than 55 pounds) that are operated outdoors in the NAS. Beyond that baseline, however, the FAA asked the Task Force for recommendations regarding additional minimum requirements for small unmanned aircraft that would need to be registered. In particular, the agency asked the Task Force to consider factors including, but not limited to, technical capabilities and operational capabilities such as size, weight, speed, payload, equipage, and other factors such as the age of the operator.

The safety of the non-flying public and of other users of the NAS was central to the Task Force's determination of what category of small unmanned aircraft to recommend for exemption from the registration requirement. With considerations of safety in mind, the Task Force addressed the possibility of recommending an exclusion based on various factors, including: Weight (alone and in combination with altitude or kinetic energy), mass, speed, kinetic energy, payload, equipage (*e.g.*, camera, GPS), and operational capabilities, such as the ability to navigate the airspace, the ability to operate above a certain altitude above ground level, the ability to operate beyond the visual line of sight of the operator, the ability to operate autonomously, and flight duration.

The Task Force ultimately agreed to use a mass-based approach to determine an appropriate category of small unmanned aircraft to recommend for exclusion from the registration requirement. This was based upon the probability of a catastrophic event occurring (*i.e.*, death or serious injury) due to a collision between a small unmanned aircraft and a person on the ground. The Task Force further stated that because of the lack of data on unmanned aircraft-aircraft collisions, engine ingestion, and propeller impacts by unmanned aircraft, the probability of a catastrophic event occurring due to those events was not part of its consideration. Rather, the task force noted that research in this area continues and as it becomes available, this threshold should be evaluated and adjusted accordingly. This approach best satisfied the Task Force's concerns about safety and provided a minimum weight threshold for registration that is easy to understand and apply and would therefore encourage compliance.

The formula considered by the task force is a standard aviation risk assessment formula used in consideration of manned aircraft safety. For ease of administration and small unmanned aircraft owner understanding, the Task Force strongly advised a mass-based approach for determining the generally safe threshold below which a small unmanned aircraft system would not need to be registered.

The Task Force recommended that the FAA should exempt from the registration requirement any small unmanned aircraft weighing 250 grams (g) or less. The 250 grams or less exclusion was based on a maximum weight. The Task Force assumed maximum weight was defined as the maximum weight possible including the aircraft, payload, and any other associated weight.

The Task Force proposed this mass by considering: The maximum free-fall kinetic energy of a small unmanned aircraft from 500 feet (ft) above ground level; research papers assessing the lethality of inert debris based on kinetic energy; and a determination of the probability that a small unmanned aircraft with potentially lethal kinetic energy would strike a person on the ground. The Task Force's recommendation assumed population density for a densely packed urban environment, as well as a conservative estimate of the percentage of people in that crowded environment who may be unprotected and susceptible to injury from a falling small unmanned aircraft. To determine the probability of an accident, the Task Force provided an estimate of the mean time between failure (MTBF) for small unmanned aircraft. Mathematically, the Task Force predicts that the likelihood of a fatal accident involving a small unmanned aircraft weighing 250g or less is 4.7×10^{-8}, or less than 1 ground fatality for every 20 million flight hours of small unmanned aircraft 250g or less. The Task Force noted that the acceptable risk level for commercial air transportation is on the order of 1×10^{-9}, and general aviation risk levels are on the order of 5×0^{-0}.

The Task Force emphasized that this recommendation is conditioned on the premise that this and the Task Force's other recommendations will be accepted, without alteration. Certain members of the Task Force asked that it be noted that this is a nascent industry with very little experiential data to inform the assumptions and that periodic review of the data may be warranted. Certain Task Force members noted that the FAA's 25 years of bird strike data show that fatal aircraft accidents caused by small and medium birds (weighing four pounds on average) are extremely rare despite the presence of billions of birds within the low altitudes where small UAS typically fly, and urged the FAA to select a weight that posed a similar safety risk. Task Force members representing manned aircraft organizations expressed specific concerns that data on UAS-aircraft collisions, engine ingestion, propeller, and rotor impacts by UAS was not available when determining the weight threshold. All members urged the FAA to expedite its work currently underway in this area. The Task Force also emphasized that 250-gram weight threshold was agreed to for registration purposes only and was not a validation of the underlying assumptions for any purpose other than the registration requirement. All Task Force members agreed that the threshold should not be used by the FAA as an index for operational restrictions or categories in any future rulemaking unless safety concerns require the FAA to take appropriate action.

IFR Requirement: The FAA has considered the comments received to the Clarification/Request for Information and the Task Force recommendations. As noted above, the formula considered by the Task Force is a risk assessment approach that results in a method to determine which small unmanned aircraft are required to be registered. In recognition of the potential risks posed by small unmanned aircraft highlighted by the Task Force's work, the FAA agrees with the Task Force recommendation and generally agrees with its approach for purposes of aircraft registration only. The Task Force recommendation results in a simple, straight forward method to determine which aircraft should be registered. Accordingly, this rulemaking adopts the Task Force recommendation to exclude small unmanned aircraft weighing an equivalent of 250 grams or less. (FAA is using the pound equivalent of 250 grams–0.55 pounds.) The agency emphasizes, however, that the Task Force approach may be different from the approach that will be used in the sUAS Operation and Certification rulemaking to develop operating requirements.

The FAA recognizes that the Task Force recommendation strikes a balance between many stakeholders, including modelers, unmanned aircraft manufacturers, operators, retailers, and the manned aviation community. As this aviation sector continues to develop, operating experience and new technologies may compel the agency to reconsider the appropriate weight threshold for unmanned aircraft registration. Additionally, new research may necessitate a change from the weight-based approach recommended by the Task Force. Since the Task Force's methodology only assessed the

risk to individuals on the ground, the agency recognizes that additional research is necessary to evaluate the risk of collisions between small unmanned aircraft and manned aircraft. The FAA has several tests, both in-progress and planned, in collaboration with our UAS Test Sites and UAS Center of Excellence.

The FAA considered comments that advocated for the use of weight in combination with other factors and determined that these scenarios would be more difficult to implement and could cause confusion. The FAA also considered comments that recommended exclusions from the registration requirement based on operational limitations, *e.g.*, altitude, speed, visual line of sight operations only. However, at this time, the FAA is concerned that these approaches could stifle innovation in the ongoing and rapid development of sUAS technology. Thus, the FAA determined that these were not viable methods to create exclusions.

Regarding commenters who recommended that the FAA exclude certain aircraft from the requirement of registration based on the locations at which those aircraft would be operated (*e.g.*, private property), such an approach would defeat the purpose of registration, which is to identify aircraft throughout the NAS and the owners of such aircraft. Registration based on intended location would not address that intent because the NAS extends over private property. In response to the comments urging the exclusion of some or all model aircraft from the registration requirement, the FAA has determined that doing so would be contrary to the policy adopted in the October 22, 2015 Clarification/Request for Information.

In response to the comments urging the exclusion of some or all model aircraft from the registration requirement, as stated in the Clarification/Request for Information, model aircraft are indeed aircraft and thus they are subject to the statutory requirement of aircraft registration. 80 FR at 63913–63914.

In response to the commenters who advocated for a limited exemption for unmanned aircraft operated exclusively indoors, the FAA reiterates that the requirement of registration pertains to aircraft operated in the NAS, thus outdoors. An exception is not required to stipulate that small unmanned aircraft operated exclusively indoors are not required to register with the FAA.

Regarding comments received to the Clarification/Request for Information pertaining to the micro UAS proposal contained in the sUAS Operation and Certification NPRM, the FAA notes that issues pertaining to weight classifications for purposes of sUAS operation and certification purposes are outside of the scope of this rulemaking.

Regarding comments pertaining to privacy and operational concerns, the agency clarifies that this rulemaking is intended only to provide relief from the existing part 47 registration requirements. Pursuant to the Presidential Memorandum issued on February 15, 2015, Promoting Economic Competitiveness While Safeguarding Privacy, Civil Rights, and Civil Liberties in Domestic Use of UAS, the National Telecommunications and Information Administration (NTIA) is leading a multi-stakeholder engagement process to develop and communicate best practices for privacy, accountability, and transparency issues regarding commercial and private use of UAS in the NAS, and will address these issues through that process.

D. Eligibility To Register

1. Citizenship

This final rule includes the statutory eligibility requirements for aircraft registration as required by 49 U.S.C. 44102. An aircraft may be registered under 49 U.S.C. 44103 only when the aircraft is not registered under the laws of a foreign country and is owned by (1) a citizen of the United States; (2) an individual citizen of a foreign country lawfully admitted for permanent residence in the United States; or (3) a corporation not a citizen of the United States when the corporation is organized and doing business under the laws of the United States or a State, and the aircraft is based and primarily used in the United States. The FAA may also register aircraft owned by the United States government or a State or local governmental entity. *See* 49 U.S.C. 44102. Part 47 includes these statutory eligibility requirements.

sUAS Operation and Certification NPRM: The sUAS Operation and Certification NPRM addressed the applicability of the statutory aircraft-registration requirement by proposing to require all small unmanned aircraft subject to the proposal to be registered pursuant to the existing registration process of part 47. *See* 80 FR 9574. The NPRM did not address issues pertaining to the eligibility to register (including citizenship).

Although the sUAS Operation and Certification NPRM did not address the issue of aircraft owner citizenship as it relates to small unmanned aircraft in part 47, one commenter to the NPRM raised the issue. DJI acknowledged the constraints the statutory aircraft registration requirements place on the FAA, but believed that those restrictions prevent most foreign citizens from operating a small UAS commercially in the United States. DJI presumed that tourists operating small UAS as model aircraft would be allowed to do so. DJI urged the FAA to consider asking Congress either to drop the aircraft registration requirement for all small UAS altogether or to withdraw the citizenship requirement (including its limited exceptions).

Clarification/Request for Information: Rotor Sport recommended against requiring U.S. citizenship for registration of small UAS because it would be ''severely detrimental'' to the rotor sport industry. In particular, Rotor Sport stated that requiring citizenship for small UAS that are already governed by the Amateur Competitive Sport regulations of the AMA ''would severely and financially impact international drone racing events, including the 2016 World Drone Racing Championship being held in Hawaii.''

Task Force: As part of its discussions regarding who should register a small unmanned aircraft, the Task Force addressed the issue of citizenship status of applicants for registration. Considering the goals of encouraging the growth of the UAS industry and compliance with the registration requirement, the Task Force recommended there be no U.S. citizenship or residency requirement for registration eligibility. If, however, the FAA does include a U.S. citizenship requirement, the Task Force recommended that the agency use its discretion to permit non-citizen owners to operate in the U.S. by applying for a waiver from the registration requirement for a specified period of time (consistent with 49 U.S.C. 41703(a)(4)). The Task Force believed that eliminating the citizenship requirement would help achieve the goal that small unmanned aircraft owners are known to the FAA for safety purposes.

IFR Requirement: While the FAA can make certain changes to the registration system regarding the types of information to be collected, and how that information is collected, the statutory requirements pertaining to citizenship in 49 U.S.C. 44102 are clear. The statutory citizenship criteria must be satisfied in order to obtain a certificate of U.S. registration.

As noted above, registration is just one requirement that must be satisfied in order to operate an aircraft in the U.S. With respect to the operation of unmanned aircraft, Article 8 of the

Convention on International Civil Aviation, signed at Chicago on 7 December 1944 and amended by the ICAO Assembly (Doc 7300) addresses 'pilotless aircraft' and states that:

> No aircraft capable of being flown without a pilot shall be flown without a pilot over the territory of a contracting State without special authorization by that State and in accordance with the terms of such authorization. Each contracting State undertakes to insure that the flight of such aircraft without a pilot in regions open to civil aircraft shall be so controlled as to obviate danger to civil aircraft.

For those that do not satisfy the citizenship requirements for U.S. registration, consistent with the authority in 49 U.S.C. 41703, the Secretary may authorize certain foreign civil aircraft to be navigated in the U.S. only (1) if the country of registry grants a similar privilege to aircraft of the U.S.; (2) by an airman holding a certificate or license issued or made valid by the U.S. government or the country of registry; (3) if the Secretary authorizes the navigation; and (4) if the navigation is consistent with the terms the Secretary may prescribe. *See also* 14 CFR part 375, Navigation of Foreign Civil Aircraft in the United States.

In this instance, with respect to those individuals who do not satisfy the citizenship requirements and yet wish to conduct model aircraft operations in the U.S., the Secretary has determined, consistent with Article 8, and the authority under 49 U.S.C. 41703, as implemented in 14 CFR part 375, that it is appropriate to allow these operations to occur provided that individuals complete the process set forth in 14 CFR part 48 and comply with the statutory requirements for conducting model aircraft operations in Public Law 112–95, section 336 (Feb. 14, 2012). For these individuals, recognizing that most ICAO member states have not imposed a registration or airworthiness requirement for these small unmanned aircraft, we will recognize these aircraft as ''other foreign civil aircraft'' as defined in 14 CFR 375.11. Consistent with the Secretary's authority in section 333 of Public Law 112–95, provided the aircraft are operated exclusively as model aircraft in accordance with section 336 of Public Law 112–95, an airworthiness certificate will not be required. Section 375.38 will require individuals to comply with § 48.30 and pay a $5 fee, complete the application and the registration process in §§ 48.100(b) and (c), 48.105, and 48.115; mark the aircraft in accordance with the provisions in §§ 48.200 and 48.205, and comply with the statutory model aircraft requirements in section 336 of Public Law 112–95. The agency will consider the certificate that is issued to be a recognition of ownership rather than a certificate of U.S. aircraft registration. These conditions are consistent with and impose no greater burden than the requirements imposed on U.S. citizens conducting model aircraft operations in the U.S.

2. Commercial Activity Conducted by Non-U.S. Citizens

A corporation that is not a citizen of the United States may register an aircraft in the United States when the corporation is organized and doing business under the laws of the United States or a State, and the aircraft is based and primarily used in the United States. 49 U.S.C. 40102(a)(1)(C). This statutory limitation exists in order to prevent the United States registry from ''becoming an international registry'' and ''United States aircraft registration from becoming a so-called 'flag of convenience.' '' *See* 44 FR 61937, 61937–61938 (October 29, 1979).

Part 47 implements the requirement to define ''based and primarily used in the United States.'' Under part 47, aircraft are deemed to be ''based and primarily used in the United States'' if one of the following conditions is satisfied: (1) The aircraft is used exclusively in the United States during the period of registration; or (2) the aircraft flight hours accumulated within the United States amount to at least 60 percent of the total flight hours of the aircraft, measured over six month intervals. § 47.9. Because operations by small unmanned aircraft registered in accordance with part 48 are limited to operations within the United States, it is not necessary to further define ''based and primarily used in the United States'' as provided in part 47.

With respect to foreign-owned or controlled entities or individuals who want to conduct non-recreational UAS operations but who do not satisfy the definition above and thus cannot register their aircraft in the United States under either 14 CFR part 47 or part 48, the Department and the FAA may consider allowing these operations to occur with additional authorization under the authority of 49 U.S.C. 41703, the provisions of 14 CFR part 375, and other safety authorizations as deemed necessary by the FAA. Comments are requested on what factors the FAA or the Department should consider in determining whether and when to grant such authorizations. The Department will address these authorizations in more detail in the sUAS Operation and Certification final rule, the final rule on sUAS registration, or other rulemaking as appropriate. For more information and guidance regarding authorities for non-U.S. citizens, please contact the Department's Foreign Air Carrier Licensing Division.

3. Minimum Age To Register

Clarification/Request for Information: In the Clarification/Request for Information document, the agency sought comments on whether there should be a minimum age at which a person would be permitted to register a small unmanned aircraft. An individual commenter opposed a minimum age requirement, noting that a 10 year old can be safer than a 30 year old. A few other individual commenters did, however, recommend a minimum age requirement to register and operate a UAS—one commenter recommended 21 years old (to purchase and operate a UAS), two commenters recommended 18 years old (to register a UAS), and one commenter recommended 16 years old (to register a UAS). Another individual commenter said there should be an age requirement to purchase UAS weighing more than 4 pounds. That commenter did not, however, suggest an age at which this requirement should be set. One commenter pointed to the existence of child protection laws and questioned how the FAA will protect privacy interests in the registration process.

Task Force: Due to the anticipated use of a Web-based application process for part 48, the Task Force considered age-related limitations applicable to Web-based information collection. Consistent with the Children's Online Privacy Protection Act (COPPA), 15 U.S.C. 6501–6505, the Task Force recommended a requirement that individuals be 13 years or older to register a UAS.

IFR Requirement: In response to the comments from the Clarification/Request for Information, the agency notes that the comments did not provide justification for an age restriction for purposes of registration given that there is no minimum age for the operation of some sUAS and the agency proposed a minimum age of 17 for operation of sUAS used for commercial (non-hobby or non-recreational) purposes. Although one commenter proposed that the registration age should be linked to the weight of the aircraft, given that the registration process provided by this final rule is exclusively Web-based, protections for minor registrants must control. The FAA agrees with the Task Force recommendation to limit Web-based small unmanned aircraft registration to persons age 13 and older and has included this requirement in this IFR.

As a matter of policy (OMB Guidance for Implementing the Privacy Provisions of the E-Government Act of 2002), all Web sites and online services operated by the federal government and contractors operating on behalf of federal agencies must comply with the standards set forth in the Children's Online Privacy Protection Rule (16 CFR part 312). COPPA applies to Web site operators (including mobile apps) directed to children under 13 that collect, use, or disclose personal information from children. It also applies to operators of general audience Web sites or online services with actual knowledge that they are collecting, using, or disclosing personal information from children under 13. COPPA also applies to Web sites or online services that have actual knowledge that they are collecting personal information directly from users of another Web site or online service directed to children. Operators who are covered by COPPA must:

1. Post a clear and comprehensive online privacy policy describing their information practices for personal information collected online from children;

2. Provide direct notice to parents and obtain verifiable parental consent, with limited exceptions, before collecting personal information online from children;

3. Give parents the choice of consenting to the operator's collection and internal use of a child's information, but prohibiting the operator from disclosing that information to third parties (unless disclosure is integral to the site or service, in which case, this must be made clear to parents);

4. Provide parents access to their child's personal information to review and/or have the information deleted;

5. Give parents the opportunity to prevent further use or online collection of a child's personal information;

6. Maintain the confidentiality, security, and integrity of information they collect from children, including by taking reasonable steps to release such information only to parties capable of maintaining its confidentiality and security; and

7. Retain personal information collected online from a child for only as long as is necessary to fulfill the purpose for which it was collected and delete the information using reasonable measures to protect against its unauthorized access or use.

The Registry, through the small unmanned aircraft registration Web site, is expected to gather personal information as defined by COPPA, such as first and last name, a physical or mailing address and online contact information. In light of these requirements, the registration Web site will require a responsible person age 13 or over to complete the registration application, providing their name in place of the child's name when the aircraft owner is a child under 13, as required by § 48.15.

All aircraft owners who are age 13 and older will be required to register in their name as the aircraft owner. The agency does not expect a person who turns 13 after the date on which the Certificate of Aircraft Registration is issued but before renewal is required, to reregister their small unmanned aircraft in their own name. The agency expects this change to take place at the time of registration renewal. Until such time, the responsible person can continue to meet the obligations of the owner for purposes of device identification.

We recognize that in order to register in the system, the payment of the fee requires the use of a credit, debit, gift, or prepaid card using the Visa, MasterCard, American Express, JCB, Discover, or Diners Club network. For owners who are age 13 and older who do not have access to one of these payment methods, a parent, guardian, or responsible person could submit payment on their behalf using one of these options.

E. Registration Required Prior to Operation

1. Registration Prior to Operation

Clarification/Request for Information: The FAA requested comments on the point at which registration should occur (*e.g.,* point-of-sale or prior to operation). Several trade associations whose members use UAS (News Media Coalition, Air Medical Operators Association, Aerospace Industries Association (AIA), and Property Drone Consortium), Modovolate Aviation, LLC, and Morris P. Hebert, Inc. supported point-of-sale registration. A number of individuals stated that registration at point of sale was the only approach that would ensure that registration would occur at least for ready-to-fly UASs. These commenters stated that many operators would not register later. Some of these commenters, however, questioned whether point-of-sale registration could be applied to home-built or traded UASs. A few commenters compared the registration process to that which occurs for car and gun sales. Some commenters stated that an unlock process should be included so that the UAS could not be used until registration was complete. Another suggested registering the beacon, not the UAS. Commenters stated that point-of-sale registration, with the seller handling the information, would reduce the burden on buyers. Some individuals stated that purchasers should have to demonstrate that they were familiar with the rules for operation.

Chronicled, Inc. stated that a registration system should be designed to integrate all POS systems that currently exist; this commenter assumed that each buyer would have an email address and government ID number that could be used to set up a registration account by downloading a mobile app. This company also assumed that the product would include a public key infrastructure (PKI) chip. The Real Time Technology Group stated that vendors could easily verify IDs presented by checking public records, and government watch lists.

The National Agricultural Aviation Association (NAAA), the Colorado Agricultural Aviation Association, and an individual stated that the burden on vendors would be no greater than submitting credit card charges. NAAA recommended that initial registration occur at the manufacturers, with all subsequent sales involving a transfer of ownership. A law firm and individual commenters generally supported having the vendor submit the information because, they argued, this would ensure that the registration occurred. One suggested that the vendor submit a temporary registration with the purchaser required to submit a final version.

Most commenters that addressed this issue expressed either opposition to the approach or concerns about the viability of point-of-sale registration for some sales. AT&T Services, Inc. questioned the FAA's legal authority to impose a registration requirement at the point-of-sale, given that the statutory authority underlying the UAS registration requirement, as well as its implementing regulation, applies to persons who ''operate'' aircraft. In this case, AT&T asserted, it is the owner of the UAS who ''operates'' it, and should therefore be responsible for registering it.

The Retail Industry Leaders Association (RILA) stated that point-of-sale registration would require the FAA to build new information technology systems to collect the information and retail outlets would have to build and test systems to link to the FAA. RILA stated that this was unlikely to happen in the short timeframe the FAA is proposing. RILA further stated that the practical realities of implementing a

point-of-sale registration system in time for this holiday season would impose heavy and costly administrative burdens on the FAA and retailers while at the same time raising serious consumer privacy concerns.

The National Retail Federation (NRF) stated that many retail point-of-sale systems are not configured to capture individual product identifying information. From a product's UPC code, many point-of-sale systems will identify the type of item, but cannot be configured to automatically capture information identifying each unique instance of an item type, such as a serial number. NRF stated that point-of-sale registration would require retailers to build a manual intervention process into their point-of-sale systems; cashiers would have to manually capture the serial number of the UAS and other required registration information. The commenter said this process would require training sales personnel, which imposes labor costs.

RILA and NRF stated that collecting personal information in a checkout line was problematic and presented data safety issues. RILA stated that it would cause significant delays in checking out for both UAS buyers and other customers. For both store and online sales, RILA stated that the retailer would have to explain the requirements to the customers because many would not be aware of the FAA rule. RILA also stated that point-of-sale registration would not capture the needed information for those UAS that are bought as gifts. Finally, RILA stated that a point-of-sale requirement would regulate sales rather than operations and questioned whether the FAA has the authority to regulate sales.

A number of individual commenters stated the point of sale would not work for people who build their own models from purchased parts or 3D-generated parts, for many online sales, and for purchases from foreign Web sites. One commenter stated that he bought parts without necessarily knowing exactly what kind of model he will build. Another commenter stated that some kits are sold by individuals operating small businesses from their homes. Several individuals suggested that the FAA provide identification numbers to purchasers so that the seller would only need to record the numbers. Other commenters recommended that AMA membership or proof of registration with the FAA be required at point of sale.

RILA, Horizon Hobby, and many individual commenters supported registration prior to operation. They stated that this approach would make it possible to capture the many UAS that are purchased as gifts, from foreign Web sites, or sold privately and those that are constructed by the operator. A number of commenters suggested that this would allow the operator to affix the registration number on the UAS. Other commenters stated that they own multiple aircraft and asked that the operator, rather than the aircraft, be registered. A few individuals stated that the registration process could be handled when the owner filed the warranty card. One commenter stated that a prior to operation placement of name and contact information in the aircraft would be a more efficient means of ensuring the identity of the person piloting the aircraft is tied to the aircraft. Another individual stated that in some cases models are started by one person, passed on to others, and perhaps never finished or flown; including such models would serve no purpose.

The NRF stated UAS should be manufactured so that they can only be turned on and operated after the consumer registers the UAS and receives and applies an activation code. A manufacturer, Drone House Joint Stock Company, stated that this approach is its model for registration.

Another individual questioned how the FAA has authority to require registration of UAS that are ''on the ground, not being flown, with the drone being turned off, in a box, and inside a building.'' This commenter asserted that, consistent with 14 CFR parts 1, 47, and 91 and 49 U.S.C. 44101(a), the FAA only has jurisdiction over a UAS that is in operation.

Task Force: The Task Force approached its discussions of the registration process with two goals in mind—to ensure accountability by creating a traceable link between aircraft and owner, and to encourage the maximum levels of regulatory compliance by making the registration process as simple as possible. To achieve the twin goals of accountability and compliance, the Task Force recommended the FAA institute a simple, owner-based registration system in which the FAA issues a single registration number to each registrant which covers all unmanned aircraft owned by that registrant.

The Task Force also addressed the question of registration process design. Because 49 U.S.C. 44101(a) stipulates that a person may only *operate* an aircraft when it is registered with the FAA, the majority of Task Force members believed the FAA cannot require registration of unmanned aircraft at the point-of-sale. Some members of the Task Force expressed the opinion that maximum compliance can best be achieved with point-of-sale registration and those members therefore encouraged the FAA to include it as one of several options for registration. Several other members of the Task Force pointed out that, because the FAA's authority extends only to *operation* of aircraft, point-of-sale registration cannot be mandated.

IFR Requirement: The FAA agrees with the Task Force recommendation and comments stating that registration should be required prior to operation of the small unmanned aircraft, as opposed to at the point of sale. As referenced by the Task Force report, 49 U.S.C. 44101(a) stipulates that a person may only operate an aircraft once it is registered with the FAA.

Registration prior to operation as opposed to point-of-sale registration also avoids a number of logistical considerations associated with consumer product purchases identified by commenters, such as distinguishing the purchaser from the ultimate owner, and the burden placed on retailers when such a transaction occurs at a cash register in a store.

The agency emphasizes, however, that conformance to the statutory requirement to register prior to operation does not foreclose the opportunity for the development of a point-of-sale web-based application for registration that relieves the associated burdens identified by commenters. The agency encourages innovation in point-of-sale registration as it may provide the agency with a means by which to receive information regarding small unmanned aircraft in a seamless fashion, and hopes to work with retailers and manufacturers in the future to make the process as simple as possible.

In response to commenters' concern about whether a small unmanned aircraft that is not used in the NAS (*i.e.* indoors) would be inadvertently registered via point-of-sale registration, the agency confirms that only those small unmanned aircraft that are operated outdoors must register. Further, there is no obligation to register a small unmanned aircraft that will not be operated outdoors.

2. Registration of Each Aircraft

Clarification/Request for Information: Most commenters favored a requirement to register the owner [36] of the UAS

[36] Some commenters said the registration requirement should apply to the ''owner'' while other commenters said it should apply to the

Continued

instead of a requirement to register the UAS itself. Under this registration scheme, each owner would receive a single, unique registration number that would cover every UAS that person owns. Many commenters pointed out that this is how the AMA handles registration. Commenters asserted that a requirement to register each individual UAS is impractical and overly burdensome, particularly in light of the fact that most recreational users own multiple (often many) UAS. Commenters also pointed out that many UAS owners, especially those who build their own aircraft, regularly replace parts, as well as trade and sell their aircraft with other UAS owners. Those commenters asserted that a requirement to register the owner instead of the aircraft would alleviate the burdens associated with re-registering an aircraft each time such an event occurs. Commenters also claimed that registration of the owner of a UAS is all that is necessary to satisfy the DOT and FAA goals of traceability and accountability.

EPIC stated that a UAS registration requirement is an ''absolutely essential'' requirement to establish accountability for use of ''autonomous surveillance devices'' in the United States. EPIC further stated, however, that to ensure that the registry fosters accountability and responsibility among UAS operators, the registry must include provisions addressing privacy issues ''to ensure a comprehensive baseline set of protections that facilitate the safe integration of drones.''

Union Pacific Railroad similarly stated support for ''reasonable measures by the FAA to encourage accountability and responsibility among all UAS operators, including recreational users of sUAS.''

A number of commenters recommended that the FAA implement a licensing system like the FCC uses to register amateur radio operators. Commenters drew comparisons between amateur radio operators, most of whom own many different pieces of radio equipment, and hobby aircraft modelers, many of whom own many different model aircraft. Commenters explained that under the FCC licensing system the operator, not the equipment, is licensed for non-commercial operations after passing a safety test. Commenters asserted that registration alone does not guarantee a model aircraft operator understands the rules of safety for operating in the NAS, so a licensing system with a testing component may be the best way to ensure safe operations in the NAS. One commenter acknowledged that licensing model aircraft operators would require a change in the law, but stated his belief that there is wide support for this in both Congress and the modeling community.

One commenter recommended that individuals be required to pass a background check before getting a license for UAS operations. Other commenters said the registration system should be more like the systems to obtain a license to hunt or to operate a boat, and less like firearm registration.

In contrast to those commenters who advocated for an owner-based registration system, Delair-Tech stated that each entry in the registration database ''should be attached to exactly one UAV.'' Aviation Management said the FAA should consider independent registration for a UAS operator in addition to registration of the unmanned aircraft and all of its support systems, including the ground control station.

The National Air Transportation Association expressed its support of the registration requirement, but acknowledged the ability to track an unsafe or noncompliant UAS back to the operator is limited to incidents in which the UAS is disabled, but not too damaged to obtain registration information. Several commenters, including the Competitive Enterprise Institute, questioned the usefulness of a registration number for identification purposes asserting a registration number would be impossible to read during flight, would only be useful after an incident has occurred and only if the UAS is recovered. Some commenters said affixing the name and contact information of the owner to or in the aircraft will serve the same purpose with much less expense. Other commenters said because it will be very easy for an individual to ignore the registration requirement, the small benefit of registration will be greatly outweighed by the burden placed on the model aircraft industry and the cost of implementing and maintaining the system.

NAAA and CoAA said registration will help track down who is responsible after an accident, but noted that FAA will not be able to enforce illegal and unsafe operations without requiring UAS to be equipped with an ADS–B like system through which to trace them.

Task Force: The Task Force recommended an owner-based registration system to achieve the goals of accountability and compliance. Under the Task Force scheme, the FAA would issue a single registration number to each registrant that would be used to identify all unmanned aircraft owned and operated by that registrant.

IFR Requirement: The FAA sought to integrate the Task Force recommendation and comments regarding an owner registration approach while also considering the best public policy with respect to small unmanned aircraft registration. As addressed in the preamble discussion ''Registration Process,'' the registration system will differentiate between small unmanned aircraft intended to be used exclusively as model aircraft and small unmanned aircraft intended to be used as other than model aircraft in that different information will be collected for each population.

Small unmanned aircraft intended to be used exclusively as model aircraft will be registered with a single Certificate of Aircraft Registration issued to the aircraft owner. As with all other small unmanned aircraft, registration must be completed prior to operation of a small unmanned aircraft exclusively as a model aircraft. Owners of small unmanned aircraft intended to be used as model aircraft must complete the registration application process by submitting basic contact information, such as name, address, and email address. The owner will receive a Certificate of Aircraft Registration with a single registration number that constitutes the registration for each of this particular owner's aircraft. There would be no limit to the number of small unmanned aircraft registered under the owner's registration. This approach serves the purpose of the statutory aircraft registration requirement because each small unmanned aircraft must bear the owner's registration number, thus allowing for the aircraft and its owner to be identified.

The agency notes that, once an aircraft is no longer exclusively used as a model aircraft, then the owner must complete a new registration application in accordance with the requirements for aircraft used as other than model aircraft.

The owner of a small unmanned aircraft intended to be used as other than a model aircraft must complete the registration application by providing aircraft-specific information in addition to basic contact information. The owner will receive a Certificate of Aircraft Registration with a registration number for each individual aircraft registered.

The agency determined that this registration approach is necessary for entities intending to use small

''pilot'' or ''operator.'' Because these commenters were largely members of the model aircraft community, and therefore both the owners and operators of their aircraft, this seems to be a distinction without a difference.

unmanned aircraft as other than model aircraft because, based on the agency's experience with exemptions issued under section 333 of Public Law 112–95, these entities are expected to conduct a higher volume of operations, utilize multiple aircraft and at times conduct multiple simultaneous operations across the country, which introduces more risk into the NAS. In contrast, a small unmanned aircraft owner who operates small unmanned aircraft exclusively as a model aircraft is expected to use only one of his or her aircraft at a time and to do so on a less frequent basis than a person conducting operations with small unmanned aircraft intended to be used as other than as a model aircraft.

Components of the owner registration approach will still be available for small unmanned aircraft used as other than model aircraft in that the agency will utilize an owner profile for the registration Web site under which multiple aircraft can be registered. Owners will have a single profile that contains all of their aircraft, and although they may register multiple aircraft under that profile, each aircraft must have a unique number that exists under that profile. The FAA notes that persons using small unmanned aircraft other than as model aircraft will not be able to use the part 48 registration system until March 31, 2016.

The FAA notes that commenters comparing the registration requirement to licensure misconstrue the purpose of registration. While registration allows the agency an opportunity to educate sUAS operators, the primary purpose of registration is to identify the aircraft owner.

F. Registration Process

1. Design of Registration System

sUAS Operation and Certification NPRM: The sUAS Operation and Certification NPRM requested comments on the registration process. Both supporters and opponents of the proposed registration provision said FAA should take steps to ease the registration process. The Property Drone Consortium stated that a streamlined registration process was necessary to ensure growth in the UAS industry. Amazon, Association of Unmanned Vehicle Systems International, the American Farm Bureau Federation, and several others urged FAA to allow online registration of aircraft. Similarly, Small UAV Coalition and AUVSI, among other commenters, urged FAA to establish an electronic UAS registration database.

Clarification/Request for Information: In the Clarification/Request for Information, the Administrator and the Secretary requested information related to the logistics of the small unmanned aircraft registration process. Specifically, the FAA and DOT requested comments on how the registration process should be designed to minimize burdens and best protect innovation and encourage growth in the UAS industry. The FAA and DOT also requested comments on whether registration should be electronic or web-based, and whether there were existing tools that could support an electronic registration process.

In response to issues raised in the October 22, 2015 Clarification/Request for Information, commenters provided numerous suggestions for designing the registration process to minimize burdens and best protect innovation and encourage growth in the UAS industry. Suggestions included: Registering operators instead of individual aircraft; providing a variety of ways to register, including online, via telephone, through a mobile application, or at various locations, such as post offices or retail outlets; implementing a licensure procedure similar to that required by FCC for ham radio operators; allowing aircraft that already comply with AMA or FCC labeling practices to meet the labeling requirements to avoid conflicting requirements; and permitting operation of UAS upon submission of registration information rather than instituting a waiting period. Some commenters recommend that small unmanned aircraft manufacturers provide information to the FAA or assist owners in providing information to the FAA.

A law firm recommended the agency use the same registration system it uses for registering manned aircraft. The commenter noted the current registration system requires the following information: A notarized statement by the builder, manufacturer, or applicant for registration describing the UAS in detail, evidence of ownership, and an Aircraft Registration Application (FAA AC Form 8050–1), which identifies UAS and the owner. This commenter suggested manufacturers provide the information regarding the UAS and its capabilities, which would reduce burdens on retailers and consumers and result in a high degree of compliance.

Comments submitted as part of the AMA form letter campaign stated that the registration process should be as automated as possible and minimally intrusive. Those commenters stated that the system of aircraft identification used by AMA members (*i.e.,* where members place their names and addresses or AMA numbers on their model aircraft) should be acceptable for AMA members as an alternative means of complying with the registration requirement. The Experimental Aircraft Association agreed that the identification used by AMA members could be allowed to meet the UAS registration requirements, which would alleviate some of the burden on the FAA while maintaining the accountability that DOT seeks through registration. However, EAA expressed doubts about the practicality of requiring registration of millions of UAS and model aircraft currently in use in the United States and feared the magnitude of the system would overshadow other safety measures.

An individual stated the main problem registration is intended to solve is the unsafe use of UAS by inexperienced or uninformed operators; therefore, the commenter recommended registrants be required to pass a test as part of the registration process.

The National Agricultural Aviation Association and the Colorado Agricultural Aviation Association stated FAA should focus on its aviation safety mission, including focusing on the safety of manned aircraft even if that resulted in requiring registration and more safety equipment for unmanned aircraft. These commenters said requiring items, such as indestructible data plate, ADS–B, and visible strobes, in addition to registration would encourage growth of the industry through accident prevention. In contrast, several individual commenters contended any registration requirement will stifle innovation and discourage growth.

Several individual commenters questioned whether the agency can handle the registration of millions of recreational UAS. One commenter noted that the registration database could become overloaded and unmanageable if every person registers every model aircraft they purchase or receive—many of which will not last past a single flight—but then fail to notify the FAA when a model is lost, destroyed, or sold. Also pointing to the short life span of most small UAS, another commenter similarly said the registration system will become overwhelmed if recreational users are required to register and re-register each model aircraft they obtain. Another commenter said that requiring UAS owners to renew their registration will ''complicate everything'' and lead to people involuntarily breaking the law when they forget to re-register their UAS.

Task Force: The Task Force broadly agreed that in order to promote greater acceptance of the registration requirement, the registration process should be as quick and easy as possible. The Task Force encouraged the FAA to consider implementing additional methods and strategies to maximize compliance with the registration requirement but without adding cumbersome steps into the process.

IFR Requirement: As has been noted previously, the FAA has developed and, by this rule, is creating an alternative, web-based registration system to register small unmanned aircraft prior to their operation. This web-based registration system is responsive to comments seeking an automated approach that is capable of managing the expected volume of registration. The agency expects that the web-based registration system will facilitate compliance with the aircraft registration requirement because of its accessibility and ease of use. Additionally, an electronic registration system complies fully with the Government Paperwork Elimination Act, Public Law 105–277, which requires that when practicable, federal agencies use electronic forms, filing, and signatures to conduct official business with the public.

As has been noted, the agency considered a point-of-sale registration approach, but ultimately determined that it would be not be feasible for manufacturers, retailers, and the agency to implement at this time. As discussed earlier in this preamble, the agency is evaluating how to address the burdens associated with point-of-sale registration identified by commenters.

2. Web-Based Registration Application

The FAA received many comments regarding whether or not the agency should create an online registration system to register UAS or their operators. The vast majority of commenters were supportive of the use of an electronic or web-based registration system to collect registration information. However, commenters articulated significant differences in how they preferred the system be established, implemented, and enforced. Several commenters said that web-based registration would be the least intrusive and burdensome method of registration. These commenters also suggested that an online system may be the cheapest way to register individuals, reducing paperwork and processing time.

Clarification/Request for Information: In responding to the Clarification/Request for Information, multiple commenters, including Horizon Hobby LLC, recommended that FAA create a registration platform that would be accessible from anywhere and any web-based device, including mobile devices. As stated by commenters, this platform could then be accessed repeatedly by individuals, allowing them to update registration information as their device specifications change. Commenters said that this type of online system would allow individuals to add new small unmanned aircraft to the registry easily and in a minimally burdensome fashion.

ATA stated that an electronic registration system would dramatically shorten the registration process and make it more manageable for the FAA. ATA also noted that any cost associated with updating the FAA's system is likely to be fairly minimal and could be offset by charging a small registration fee.

Other commenters suggested that web-based registrations be integrated into online points of sale to ensure that those devices purchased from kits are registered without placing an outside burden on operators. Commenters said that this registration would be a part of the retailer's sale process and would be a requirement of purchase; however, registration and approval would be instantaneous. These commenters, including Aviation Management Associates, indicated that this type of online registration could also include educational material and a quiz that must be passed as a condition of registration. According to the commenters, the educational material and quiz could serve as a mechanism to ensure that operators understand basic aviation laws and safety guidelines.

While most commenters were supportive of electronic or web-based registrations, some expressed concern with an entirely electronic system. Many commenters expressed concern for the registration needs of those without consistent internet access. They instead recommended a paper alternative, in conjunction with online registration, be implemented to ease the registration burden of some operators.

Multiple commenters suggested that outside of new technologies, the agency could use existing electronic registration systems as a template from which to craft a specific FAA registration program. For example, a few commenters recommended using existing e-commerce registration templates as a model. One commenter suggested that FAA work with commercial retailers like DJI to use their current registration platforms as a basis for point of sale registration. Other commenters suggested that FAA implement the registration procedures of the AMA for all operators, or use the AMA system as a template upon which the FAA can develop an equivalent system.

NetMoby and other commenters suggested that FAA leverage existing FAA and other Federal agencies' electronic registration systems to build a registration system unique to UASs. Examples provided by these commenters included creating a registration system similar to the one currently in place for FAA tail numbers, or developing a registration Web site with similar functionality to radio licensing sites. Skyward Inc, for example, recommended that FAA leverage its current FAA IT systems that it uses for other programs for use with UAS.

Several commenters remarked that there are multiple available technologies that FAA could use to aid an electronic registration process. Some of these included QR codes and RFID technologies. Commenters stated that both could be used to register and track the flight paths of UAS in the NAS. They said an RFID can be placed on aircraft that can then be read by interested parties from long distances. However, these same commenters indicated that there are potential security concerns with using RFID technology as well. Along with these technologies, commenters asserted that there are several private software development companies in operation that could produce a sufficient web-based registration product for FAA to use and implement. Two individuals noted the cost to design, implement, and maintain a centralized registration system will be significant, without an increase the safety of the NAS. Another individual said the cost of the registration program will hurt small businesses by adding an external expense to their operations.

Task Force: The Task Force also addressed the question of whether registration should be electronic or web-based, and what tools exist to support an electronic registration process. The Task Force believed the registration process should be web-based, and that the FAA should create an online registration system that allows for multiple entry points through an application programming interface (API). This would allow, for example, a sUAS manufacturer or trade organization to develop an application that communicates through an API by which it can register its customers or members by submitting registration information directly to the FAA database on their behalf. The registration information required and the certificate of registration received

would be the same regardless of what point of entry is used into the registration system. The online registration system should provide for an option for owners to edit and delete their registration information, as well as to view and print physical copies of their registration certificates through access to a password-protected web-based portal.

IFR Requirement: In § 48.30, the FAA sets out a process for streamlined registration of small unmanned aircraft. This streamlined process is exclusively web-based. The FAA agrees with commenters and the Task Force that a web-based system is much more functional than a paper system would be, and also agrees that registration compliance rates will increase dramatically when registration can be accomplished through a simple, web-based system. Additionally, the current FAA Registry would be unable to quickly process the dramatic increase in paper volume that the FAA would receive from small unmanned aircraft registration. With the implementation of the small unmanned aircraft registration process, small unmanned aircraft registration will be fully automated, allowing for the registration of small unmanned aircraft without delay. Therefore, a web-based system benefits both applicants and the FAA. The paper-based part 47 process will remain available for those applicants who are unable to avail themselves of the part 48 process.

The web-based registration system itself will be simple, easy to use, and mobile friendly. To complete the registration process, the owner of a small unmanned aircraft will enter the information identified in § 48.100 (identified within the registration system as data fields) and pay a fee through the web-based registration system. A Certificate of Aircraft Registration will be available to print within the registration system or sent to the registrant via email following the initial registration and subsequent renewals. The applicant will have 24 hours to correct registration information after the initial payment without having to pay a second time.

Once registered, owners will be able to access the registration Web site to update the information provided to register the aircraft as well as cancel registration as circumstances require (*e.g.,* aircraft destruction, transfer, sale, change in owner eligibility to register). Aircraft owners may also view and print physical copies of their registration certificate through access to this password-protected web-based portal, but must only pay a fee for the initial registration and renewals. There is no fee for updating personal information or accessing the registration certificate. For the initial release the user can add an alternate email address which can be used to reset the account password and all functionality of the system could still be utilized if the user lost access to their primary email address. For future releases we will have the ability to change the primary email address on file and revalidate the new one.

Canceling a registration would change the state of the registration in the database to ''cancelled'' or another state that is not associated with an active registration. Aircraft registration records are permanent records and would not be deleted or destroyed. Please refer to the NARA schedule for additional details

With respect to Task Force and **Federal Register** comments regarding different technical aspects the database should contain, the agency expects to continuously evaluate the database and the web-based registration process and look for opportunities to further develop the technical functionality of both. The FAA's goal in utilizing the least burdensome approach is to encourage prompt compliance by removing barriers. As with other aspects of sUAS integration into the NAS, our approach to registration will be incremental. The Administrator may authorize expanded technical capabilities going forward, but the initial goal is to make this process as minimally burdensome as possible to encourage compliance with the registration requirement, and provide the FAA and law enforcement the ability to quickly connect individuals to their aircraft with the least amount of steps possible.

With regard to comments addressing the use of RFI technology or use of small unmanned aircraft beacons to assist with registration and identification, the FAA believes that RFI and other technology could be cost prohibitive, and could add weight to smaller aircraft. The FAA believes that the same goal—identification of small unmanned aircraft and their owners—can be achieved through an online registration process with less expense and less technological investment.

3. Information Required

sUAS Operation and Certification NPRM: The sUAS Operation and Certification NPRM requested comments on what information should be required for registration. A few commenters provided feedback as to whether small UAS owners should be required to provide additional information during the registration process so that UAS could be categorized. Amazon, American Farm Bureau Federation and an individual stated that small UAS owners should not be required to provide any additional information beyond what is currently required of manned aircraft. The University of North Dakota's John D. Odegard School of Aerospace Sciences recommended that FAA adopt a simplified information-gathering process to include the following data: Manufacturer identification (if applicable); known performance and limitations; physical size, weight, and characteristics; and, if self-built, a list of major components similar to that provided by commercial manufacturers. The commenter stated that this minimal information would allow for future safety-related research by establishing base categories from which comparisons could be made. NOAA and Schertz Aerial Services, Inc. suggested that FAA impose similar requirements as those imposed on amateur-built aircraft. According to NOAA, UAS owners should be required, at a minimum, to describe the aircraft by class (UAS), size, color, number of motors/props/wings, serial number, make, and model. Predesa, LLC recommended that digital photos or video recordings of the aircraft, as well as written records of manufacturers' part numbers of supporting equipment used by the operator, can satisfy the need for additional information to accurately describe a non-standardized small UAS.

Clarification/Request for Information: A majority of commenters stated that only basic information should be collected during the registration process because of commenters' concerns about data security. Several commenters suggested that commercial UAS operators should provide more in-depth information than recreational operators. The vast majority of commenters, including individuals and organizational stakeholders, stated that owner/business name, address, telephone number, email address, and description of the UAS should be collected during the registration process. Some commenters further broke down the UAS's description to include make, model, manufacturer's serial number, weight, range, performance capability, flight controller serial number and whether the UAS was purchased or home-built. Many commenters also suggested that registrants should upload a picture of the UAS. Several commenters suggested that date of sale/purchase, point of sale, date of operation, intended use and geographic location of primary use would also be helpful information.

AMA members also stated that their AMA member numbers should be collected.

To provide further information about the aircraft owner, many commenters suggested that the operator's date of birth, driver's license, Social Security Number, and number of aircraft owned should be provided during the registration process. Other commenters specifically objected to providing their Social Security Numbers because of concerns about data security. A few individuals who identified as hobbyists stated that insurance information and professional license numbers should also be collected during registration. A small number of commenters suggested registrants should provide their passport numbers, credit card numbers, nationality, and proof of citizenship.

EPIC stated that the FAA should limit the collection of registrant information to what is necessary to maintain the aircraft registry and UAS safety. In particular, EPIC stated that the FAA should not collect ''highly restricted personal information,'' including ''an individual's photograph or image, social security number, medical or disability information.'' [37]

EPIC also recommended that the FAA require disclosure of each UAS's technical and surveillance capabilities, including data collection and storage. EPIC asserted that UAS are ''surveillance platforms'' that are able to carry a multitude of different data-collection technologies, including high-definition cameras, geolocation devices, cellular radios and disruption equipment, sensitive microphones, thermal imaging devices, and LIDAR. EPIC further asserted that UAS owners should be required to make clear at registration the specific capabilities of any video or audio surveillance technologies the UAS is carrying. EPIC stated that the public should not be left to wonder what surveillance devices are enabled on a UAS flying above their heads. EPIC further stated that the registration framework the FAA is considering does not go far enough, and should include a requirement that a UAS broadcast its capabilities and its registration number during operation, to allow members of the public and law enforcement officials to easily identify the operator and responsible party.

EPIC also suggested that the FAA consider collecting aggregate data to assist research into UAS flights and usage. EPIC clarified, however, that such research data should not include personal information.

Task Force: To ensure accountability, the Task Force recommended the FAA require all registrants to provide their name and street address, with the option to provide an email address or telephone number. While the Task Force recognized that a registrant's email address and telephone number may be useful for the FAA to disseminate safety-related information to UAS owners, the Task Force nevertheless believed disclosure of such information should be optional.

Because the Task Force recommended the FAA institute an owner-based registration system, it believed registrants should not be required to provide any vehicle information, such as serial number or make and model of the UAS, during the registration process. Registrants should, however, have the option to provide the aircraft's manufacturer serial number, so that the serial number can then be used to satisfy the marking requirement. Additionally, to ensure the broadest possible participation, this registration system should make no distinction for, or impose additional requirements upon, sUAS manufactured or purchased outside the United States.

IFR Requirement: For small unmanned aircraft used exclusively as model aircraft, the FAA adopts the Task Force recommendation to provide only basic contact information (name, address, and email address) for the small unmanned aircraft owner. This basic contact information is appropriate for registration of small unmanned aircraft intended to be used exclusively as model aircraft because owners typically only operate one aircraft at a time, which limits the variables in terms of owner identification. Accordingly, the FAA is requiring an applicant's name, physical address, mailing address if the applicant does not receive mail at their physical address, and email address. An accurate mailing address is necessary because the FAA often relies on regular mail via the United States Postal Service to provide notice of administrative actions, serve enforcement documents and provide other information. Although email will reduce the agency's reliance on regular mail for certain purposes such as the provision of educational material, a mailing address is still required to support the agency's compliance and enforcement actions.

At this time, the FAA will not be accepting manufacturer name, model name, and serial number from individuals registering small unmanned aircraft intended to be used exclusively as model aircraft. However, as discussed in the preamble discussion on registration marking, the Administrator will continue to evaluate whether serial number can serve the purpose of aircraft identification and in the future, may require use of serial number for aircraft marking purposes in place of an FAA-issued registration number. In that case, this information would be acquired at point of sale by a manufacturer.

The agency considered comments pertaining to the use of a membership number issued by an aeromodeling club such as the AMA as the registration number for an individual. After considering the design of the web-based information system, which will automatically assign a registration number to each individual applying for registration, the FAA determined that use of an aeromodeling club registration number would add unnecessary complexity.

For persons expecting to operate small unmanned aircraft as other than model aircraft, in addition to the same basic contact information required for model aircraft, registrants must provide aircraft-specific information. A manufacturer and model name, and serial number must be provided for each aircraft being registered. As previously noted, based on the agency's experience with exemptions issued under section 333 of Public Law 112–95, persons seeking to operate small unmanned aircraft other than as model aircraft are expected to conduct a higher volume of operations, utilize multiple aircraft and at times conduct multiple simultaneous operations across the country, which thereby introduces more risk into the NAS. Moreover, these entities may operate multiple identical small unmanned aircraft at one time in different locations, with different persons operating the owner's aircraft. Accordingly, the FAA has determined that aircraft data is necessary to identify aircraft used as other than model aircraft due to the range of variables with respect to the operations they conduct. The aircraft-specific data will also allow the agency to assess the demand of these small unmanned aircraft on the NAS and whether additional safety-related actions are necessary as the FAA works to integrate sUAS into the NAS.

With respect to the Task Force's recommendation that the provision of an email address should be optional, the FAA generally agrees that personal information that is not necessary for law enforcement and FAA to identify an owner should not be a mandatory entry. However, in this instance, an email

[37] To support its position, EPIC cited to and quoted from 18 U.S.C. 2725(4). Title 18 of the United States Code covers *Crimes and Criminal Procedure.* Section 2725 covers the definitions used in Chapter 123—*Prohibition on Release and Use of Certain Personal Information from State Motor Vehicle Records.*

address is necessary to create an account for a web-based registration system that includes email delivery of the Certificate of Aircraft Registration. Additionally, email allows for targeted delivery of educational other safety-related materials directly to small unmanned aircraft owners. Thus, the FAA has determined that an email address will be required for registration under part 48. However, individual's email addresses would not be released to the general public. For more information regarding the privacy protections afforded to this system and intended use of the data, please review the privacy impact assessment for this rulemaking, as well as the accompanying System of Records Notice (SORN), available for review in Docket No. DOT–OST–2015–0235.

Regarding other suggested information, such as date of birth, Social Security number, driver's license number, or specific information about components or capabilities of small unmanned aircraft being registered, the FAA believes the data identified in new part 48 is sufficient for the purposes of this registry and is the minimum that would be necessary for connecting an individual to their aircraft.

4. Fee for Registration

Currently, the FAA assesses a fee of $5 for a Certificate of Registration for each aircraft. *See* 14 CFR 47.17(a). The FAA has not updated this fee since it was initially established in 1966. *See* 31 FR 4495 (Mar. 17, 1966).

sUAS Operation and Certification NPRM: The sUAS Operation and Certification NPRM did not differentiate the process of registering a small unmanned aircraft from that of a manned aircraft and thus did not directly address fees. Under that proposed rule, an applicant registering a small unmanned aircraft would pay the same $5 fee as an applicant seeking a Certificate of Registration for a manned aircraft.

Three commenters responded to the issues related to fees for aircraft registration. One individual recommended FAA require all ''amateur enthusiasts'' to pay a fee to use the NAS. Another individual argued that the fees associated with any licensing, required yearly maintenance, and registry should be kept affordable for the small business operator.

Clarification/Request for Information: Commenters also responded to the issue of a registration fee and how the fee should be collected based on questions posed in the Clarification/Request for Information. Of the commenters that supported a registration fee, the majority stated that the fee should be nominal and suggested between $1 and $40. Other commenters suggested fees as high as $250 for hobbyists and $1,000 for commercial users. Several commenters stated that the amount of registration fee should be based upon the value of the UAS *e.g.,* a more expensive UAS would necessitate a higher registration fee. The Minnesota Department of Transportation stated that its department charges registration fees commensurate with the base price of the aircraft. This commenter explained that it charges $100 for registration for UASs valued less than $500,000. Other commenters proposed that only commercial operators should pay a registration fee. Several AMA members stated that registration should be free for AMA members. Many commenters stressed that the fee should only be used for maintenance of the Web site, education, and enforcement actions.

Many commenters said registration should be free. A number of commenters participating in a form letter campaign stated that a registration fee ''would place an unfair burden on those who may barely be able to afford to purchase model aircraft in the first place and may place barriers to continued education and technological advancement.''

A large number of commenters were concerned that registration fees for each individual UAS would be unduly burdensome because many hobbyists own several UASs and the cumulative cost of registration would be prohibitively expensive. As an alternative, many commenters suggested that the FAA should charge one registration fee per operator and allow the operator to register multiple UASs.

The vast majority of commenters objected to the imposition of any registration fee. Many commenters expressed concern that imposition of a fee would only serve to increase the size of the Federal Government and not contribute in any way to the safe operation of UASs. Commenters stated that a fee will deter registration and place an unnecessary financial burden on hobbyists. Several commenters suggested that instead of charging a registration fee, the FAA should collect fines from operators who fail to register.

The majority of commenters suggested that if registration occurs at point of sale, the cost of registration should be collected in the same manner as a sales tax. Other commenters suggested that registration fees should be collected by the retailer or built in to the purchase price. Retail Industry Leaders Association and National Retail Federation expressed opposition to point of sale registration and collection of registration fees by retailers. They cited concern about collecting personal information from customers in a checkout line and the complexity of refunding the registration fee if the UAS is returned by the customer. Commenters also expressed concerns that foreign vendors would not comply with registration requirements and consumers would be adversely impacted.

Many commenters commented generally on the collection of a registration fee and expressed that UAS operators should be able to pay the registration fee online. Commenters specifically identified support for online payments via PayPal, Amazon payments, and Bitcoin. Commenters also stated that mailing in checks or money orders should also be supported.

Skyward, Inc. and individual commenters said the system must have safeguards against false registrations, unauthorized ownership transfers, and other malicious activity.

Task Force: The Task Force believed the FAA should not impose a registration fee so as to encourage the highest level of compliance with the registration requirement. In the event that the FAA must charge a fee, the Task Force suggested a fee of 1/10th of one cent ($0.001).

IFR Requirement and Responses to Comments/Recommendations: Although the Task Force and some commenters recommended no fee for small unmanned aircraft registration for varying reasons, the FAA is required by statute to charge a fee for registration services. Section 45305 of title 49 U.S.C. directs the FAA to establish and collect fees for aircraft registration and airman certification activities to recover the cost of providing those services. Accordingly, the revenue stream generated by the fees collected under this IFR support the development, maintenance and operation of the Registry. The agency notes that section 45305 also directs the FAA to adjust these fees when the Administrator determines that the cost of the service has changed.

Given that the registration process established under part 48 differentiates between registration of small unmanned aircraft used exclusively as model aircraft and registration of small unmanned aircraft used as other than model aircraft, registration fees also differ between the two populations.

An individual owner registering small unmanned aircraft operated exclusively as model aircraft must pay a single fee of $5 for the issuance of a Certificate of

Aircraft Registration and registration number and an additional $5 fee every three years for renewal of the registration. As previously noted, for owners of small unmanned aircraft used exclusively as model aircraft, this registration constitutes registration for all small unmanned aircraft of a single owner, provided those aircraft are all used exclusively as model aircraft. Thus, for this population, part 48 provides cost reduction as compared to part 47, which requires aircraft owners to submit a separate application and $5 fee for each aircraft the owner would like to register.

The FAA will require persons owning small unmanned aircraft used as other than model aircraft (*e.g.,* for a commercial purpose) to pay a fee of $5 to register each aircraft in accordance with part 48, and a $5 fee every three years for renewal of each aircraft registration. The fees for small unmanned aircraft registration and renewal for this population is the same as that currently required by part 47.

This fee structure is in line with the recommendations from commenters who believed that the FAA should charge one fee for individuals who own small unmanned aircraft for hobby or recreational purposes. As sought by commenters, the registration requirement and fee structure for small unmanned aircraft used exclusively as model aircraft alleviates the need for these owners to complete frequent, multiple registration applications and submit a new fee each time they build or rebuild an aircraft or change out parts.

The fee for small unmanned aircraft registration must be submitted through the web-based registration application process. The registration system will permit the use of any credit, debit, gift or prepaid card using the Visa, MasterCard, American Express, JCB, Discover, or Diners Club network. If none of these methods of payment are available to the small unmanned aircraft owner, that owner may register the aircraft using the existing paper-based system under 14 CFR part 47, which allows payment by check or money order. Credit card payment is one of the attributes of the part 48 registration process that streamlines the registration process. Consistent with the requirements of 49 U.S.C. 45305, the fees are based on the estimated costs to develop and maintain the registry under 14 CFR part 48. The FAA will adjust these fees based on the actual costs of the system.

Regarding the Minnesota Department of Transportation's recommendation for a fee structure based on the value of the small unmanned aircraft, FAA's statutory authority for charging a fee for the registration of a small unmanned aircraft relates to the amount it costs for the FAA to maintain the registry, and not the value of an unmanned aircraft.

In response to comments stating that, in place of the registration fee, the FAA should collect fines for failure to comply with registration requirements, the FAA clarifies that such a fine would constitute a civil penalty. Civil penalties for failure to register are discussed in the Enforcement section of this preamble. In addition to civil penalties, however, the law requires the FAA to collect a fee for registration of aircraft. 49 U.S.C. 45305. Congress requires this fee assessment in order for the agency to offset the cost of registration. The agency does not have authority to use civil penalties to offset its costs.

5. Transfer of Ownership

Clarification/Request for Information: Commenters to the Clarification/Request for Information responded to the FAA's request for input on transfer of small unmanned aircraft.

The Aerospace Industries Association stated that transfer of ownership would require that the new end-user registers his or her identification and the platform registration. This would allow a re-check of intended use, changes/modifications to the platform, and the indication that the new user is aware of the rules of use. Delair-Tech stated that the seller should surrender ownership by deactivating the ground control software; the new owner would then register to reactivate it.

A law firm stated that the existing FAA Aircraft Bill of Sale and Aircraft Registration Application would be equally applicable to UAS. The firm also said that the current regulatory framework contains an aircraft registration renewal requirement that would be beneficial for updating records regarding ownership of UAS. The firm went on to say that the regulatory obligation to collect and submit the registration information should be placed on the seller who would have an incentive to properly transfer the registration, or otherwise risk facing certain penalties or fines related to the illegal operation of the UAS by a future owner.

Individual commenters stated that if the registration database is available online, the seller could easily record transfers of registration. A few commenters stated that the FAA should impose a fee for transfers. Individuals differed on whether the seller or buyer should be responsible for registering the transfer. A few commenters stated that the seller could remove the identification markings before sale. One suggested that the seller remove the beacon before sale. Another stated that the only registration should be the name and contact information placed on the UAS.

Modovolate Aviation stated that recording transfers would be burdensome and unenforceable. An individual stated that UASs are often altered after purchase so that transferring a registration for the original UAS may not accurately reflect the UAS that is being resold. The commenter also stated that there is no way for the seller to ensure that the buyer will register.

Task Force: Because the Task Force recommended an owner-based registration system, it believed that questions concerning how to deal with transfers of ownership are easily addressed by the registrants' marking methods.

IFR Requirement: The registration requirements in part 48 do not differentiate between methods of aircraft transfer. The registration requirements are the same whether a person or other entity acquires an aircraft by gift, purchase or other method.

The FAA agrees in part with the commenters who state that the seller should register or take other action upon a transfer and in part with the commenters who state that the buyer must register. Different actions will be necessary upon transfer or sale of a small unmanned aircraft, because the registration system differentiates between aircraft used exclusively as model aircraft and aircraft used other than as model aircraft and thus collects different information for each population.

As discussed elsewhere in the preamble, individual owners of small unmanned aircraft used exclusively as model aircraft are not required to submit aircraft-specific information. Thus, there is no need to update the registration system upon a transfer or sale. The owner, however, should remove his or her unique identifier from the aircraft before transfer or sale. The buyer or recipient of a transfer must create a new registration prior to operation only if that buyer does not already have an owner registration number. A buyer or recipient of a transfer of a small unmanned aircraft who wishes to use the aircraft as other than a model aircraft must register that aircraft and obtain a registration number specific to that aircraft. The only time a fee would be required is if the buyer or recipient must create a new registration.

Part 48 requires owners of small unmanned aircraft used other than as model aircraft to update the registration system upon transfer of ownership, destruction or export of a registered small unmanned aircraft. Thus, once a transfer of ownership has taken place, the aircraft owner must access their profile on the registration system and update the aircraft information to indicate that the aircraft has been transferred. By indicating that the aircraft has been transferred, the registration of that aircraft will be cancelled in its entirety.

Any new owner, who acquires a small unmanned aircraft by any means, and intends to use the aircraft other than as a model aircraft must register that aircraft prior to operation and mark the device with the appropriate information as discussed in the preamble discussion entitled, ''Marking.'' Consistent with the comment on the payment of a fee for a transfer, a new owner intending to use a small unmanned aircraft other than as a model aircraft must register the aircraft and thus pay the same registration fee as any other person who acquires such a device and wishes to operate it in the NAS.

In response to commenters' concerns about the identification of a transferred aircraft, owners may determine the best approach for ensuring that once they transfer an aircraft, that they are no longer identified as the owner. One commenter noted that the seller may want to remove the registration information from the aircraft. The agency supports this as a best practice but it is not required.

The agency considered comments suggesting other methods to approach the registration of transferred small unmanned aircraft (*e.g.,* deactivation of ground control software), but has determined that this approach will ensure complete and current registration information for each aircraft in the least burdensome manner.

G. Certificate of Aircraft Registration

sUAS Operation and Certification NPRM: The agency received comment on issues pertaining to certificates of registration from commenters to the sUAS Operation and Certification NPRM. In the sUAS Operation and Certification NPRM, the agency proposed to extend the part 47 registration process to sUAS but did not propose any changes to the delivery, content, or duration of registration. In the NPRM preamble, however, the agency specifically addressed its intent to retain the existing requirement for registration renewal every three years for small unmanned aircraft registration because it would increase the likelihood that the FAA's registration database contains the latest information on small unmanned aircraft and aircraft owners.

An individual recommended that aircraft registration for small UAS expire after a period of 12 to 24 months, reasoning that an annual or bi-annual renewal of registration will ensure the registration system does not become bogged down with UAS's that are no longer in operation. Furthermore, the commenter argued that the renewal process would give FAA a secondary means of verifying that operators are current and/or maintaining their licensing requirements to operate. The Kansas Farm Bureau suggested lengthening the time before a registration would expire to 6 years to assist in managing program costs from both the FAA and the small UAS operator standpoint. The News Media Coalition encouraged FAA to consider requiring re-registration only upon the sale of a UAS.

Another individual commenter suggested that UAS operators be required to store their ''official registration document'' on the card reader contained in the UAS's camera. That commenter also recommended that the ''official registration document'' contain the registrant's name, registration number, date of registration, and type of operator license (*i.e.,* commercial or hobby).

Clarification/Request for Information: Commenters to the Clarification/Request for Information also provided comments related to the Certificate of Aircraft Registration. One individual commenter recommended that UAS operators should be issued a registration card that contains basic safety information and UAS rules and regulations. Another individual suggested that UAS operators be required to store their ''official registration document'' on the card reader contained in the UAS's camera. This commenter also recommended that the ''official registration document'' contain the registrant's name, registration number, date of registration, and type of operator license (*i.e.,* commercial or hobby).

Task Force: The Task Force developed and recommended methods for proving registration and marking of small unmanned aircraft. In doing so, it addressed the issue of how Certificates of Aircraft Registration would be issued. The Task Force recommended that the FAA issue a certificate of registration to each registrant at the time of registration and that the certificate should be issued electronically (perhaps in PDF form), unless the registrant specifically requests a paper copy.

The Task Force also provided recommendations regarding the content of the certificate. The certificate should contain the registrant's name, the registrant's FAA-issued registration number, and the address of the FAA registration Web site that is accessible by law enforcement or other authorities for the purposes of confirming registration status. For registrants who elect to provide the serial number(s) of their aircraft, the certificate should also contain those serial number(s). The Task Force encouraged the FAA to include safety and regulatory information with the certificate of registration. Any time a registered sUAS is in operation, the operator of that sUAS should be prepared to produce a legible copy of the certificate of registration for inspection, in either electronic or printed form.

IFR Requirement: The agency agrees with Task Force recommendations and comments recommending delivery and availability of the Certificate of Aircraft Registration. Since the part 48 registration process is exclusively web-based, the FAA can immediately issue an electronic Certificate of Aircraft Registration, an efficiency not available under part 47.

Recognizing the prevalence of handheld electronic devices, once the registrant completes the part 48 registration process, the Certificate will be available for download. Owners may also print a hard copy of the Certificate if they wish. The applicant will also receive a copy of the Certificate via email, with accompanying educational information. Although some commenters addressed certificate storage options, the final rule does not restrict how the Certificate is stored as long as the certificate is readily available to the owner or operator, as applicable. *See* §§ 91.9(b) and 91.203(a)(2); *see also* Legal Interpretation from Mark W. Bury to John Duncan, August 8, 2014. Persons operating a small unmanned aircraft are required under 49 U.S.C. 44103(d) to present the certificate of registration when requested by a United States Government, State, or local law enforcement officer.

The Certificate of Aircraft Registration will include information that will allow the FAA and law enforcement agencies to identify the owner of each small unmanned aircraft registered under part 48. As a result, although the FAA received comments suggesting varying information that should appear on the Certificate, the FAA has determined that the Certificate will include the small unmanned aircraft owner name and FAA-issued registration number. At this

time, these two pieces of information suffice to identify the small unmanned aircraft and its owner. The agency does not agree with the comment suggesting that the Certificate include information pertaining to the ''type of operator license'' because this information is not relevant to the identification of the aircraft's owner and notes that at the time of this rulemaking, there is no ''license'' required for sUAS operations. Additionally, the FAA emphasizes that the Certificate does not imply authorization to operate.

Certificates of Aircraft Registration issued to owners who are using their small unmanned aircraft exclusively as model aircraft constitute valid registration for all of the small unmanned aircraft owned by the individual specified on the application, regardless of how many small unmanned aircraft the owner owns, though all being operated are required to be marked with the registration number. Certificates of Aircraft Registration issued to owners who are not using their aircraft exclusively as model aircraft constitute valid registration only for the specific aircraft identified on the Certificate of Aircraft Registration.

A Certificate of Aircraft Registration issued in accordance with part 48 will be effective once the registration process is complete and must be renewed every three years to provide for regular validation of aircraft registration and owner contact information. To facilitate the identification of a valid Certificate of Aircraft Registration, each Certificate will contain the issue date.

The agency agrees with comments suggesting that aircraft registrations should be renewed but does not agree with the purpose of the renewal and the time frame for renewal provided by commenters. The registration process does not collect information on airman qualifications so it may not be used to validate any related requirements. A Certificate of Aircraft Registration issued to a person using their small unmanned aircraft as a model aircraft must simply be renewed by the owner every three years, regardless of when aircraft are added to the owner's registration. Certificates of Aircraft Registration issued for aircraft used for other than model aircraft purposes must be renewed for the specific aircraft designated on the Certificate every three years.

Further, the agency has determined that three years is the appropriate duration of a certificate. This period of time is consistent with the aircraft registration renewal requirement in part 47. It also balances the cost concerns raised by the Kansas Farm Bureau with the individual's comments suggesting renewal on 12–24 month intervals.

The renewal process consists of a simple verification of existing registration information. The renewal must be completed through the web-based registration system at any time within 6 months prior to the expiration date. The system will send out a reminder at 6 months prior to certification expiration. Once completed, the Certificate will be extended for three years from the expiration date. The agency expects renewal to be efficient, particularly if the aircraft owner has ensured that the information provided to the Registry in accordance with the final rule registration process remains current during the term of the registration. If the information provided to register the aircraft changes during the period of registration, the aircraft owner must update the Registry through the web-based registration system within 14 days of the change. No fee is charged for updating information during the period of registration.

The agency agrees with the intent of the recommendation from the Task Force and the commenter to the Clarification/Request for Information regarding owner and operator education. One of the purposes of small unmanned aircraft registration is to educate sUAS owners regarding safe operations within the NAS as well as other safety information relevant to UAS operations and equipment. As discussed later in this preamble, the agency expects to accomplish its sUAS education goals by providing information to the aircraft owner during the registration process and through follow-up email communication.

Although the News Media Coalition suggested reregistration only upon a sale, there are other circumstances that would result in a need to re-register an aircraft (*e.g.,* expiration of registration due to failure to renew) and have been captured in the final rule.

H. Registration Marking

The purpose of aircraft registration marking is to provide a means for connecting an aircraft to its owner. The agency received comments on the information that should be used to identify that the aircraft is registered as well as the methods by which to display the identifying information.

sUAS Operation and Certification NPRM: The sUAS Operation and Certification NPRM proposed a requirement for small unmanned aircraft to be marked in accordance with part 45, subpart C. Subpart C provides requirements for size, spacing, and location of nationality and registration marks.

Many commenters, including the Small UAV Coalition, Aircraft Owners and Pilots Association, California Agricultural Aircraft Association, Aerospace Industries Association, Modovolate Aviation, LLC, Professional Photographers of America, Airlines for America, National Association of Mutual Insurance Companies, National Association of Realtors, DJI, and Google, generally supported the marking requirement as proposed in the NPRM.

Information that may be used for aircraft identification: Other commenters suggested alternatives to the marking requirement proposed in the NPRM. Commenters including the Association of Unmanned Vehicle Systems International, Associated General Contractors of America, the University of North Carolina System, Property Drone Consortium and Cherokee Nation Technologies suggested the FAA require registration based only on the manufacturer's serial numbers, instead of requiring an ''N'' registration number. Several individuals proposed the use of cell phone numbers in lieu of, or to augment, the registration number. The Virginia Department of Aviation supported the use of a bar code system, while Schertz Aerial Services, Inc., favored a parts-tracking requirement to facilitate a more efficient and accurate assessment of responsibility in the event of an accident. An individual commenter recommended a labeling requirement for all UAS, similar to the labeling the FCC requires for all transmitters that can be purchased at electronic outlets. Another individual commenter said that instead of requiring small unmanned aircraft to be registered with ''N'' numbers, the aircraft should be identified with an exterior label with the owner/operator's name, address, and phone number, as well as an operator certificate number where appropriate. Several other individual commenters suggested that affixing operator name and phone number to a small unmanned aircraft is a more efficient way to identify the aircraft in the event of an incident.

The New Jersey Institute of Technology and the Kansas State University UAS Program recommended the FAA add a unique designator to the ''N'' registration number (*e.g.,* ''NX'') to clearly identify the aircraft as a UAS. ASTM pointed out that it is in the process of developing consensus practice standards for the registration and marking of unmanned aircraft systems, which an individual

commenter recommended the FAA follow.

Methods to display aircraft identification: Another individual commenter said the marking requirement should be consistent with recent certificates of waiver or authorization provided to persons issued exemptions under section 333 of the FAA Modernization and Reform Act, which allow for ''appropriate'' sized markings, or as large as practicable for the particular aircraft. Other commenters, including a joint submission from the State of Nevada, the Nevada Institute for Autonomous Systems and the Nevada FAA-designated UAS Test Site, similarly said small unmanned aircraft should be required to display registration numbers in the largest size that is appropriate. An individual commenter questioned whether the markings should be on the underside of the small unmanned aircraft to increase visibility from the ground. The University of North Dakota's John D. Odegard School of Aerospace Sciences urged the FAA to require small UAS manufacturers to provide at least one additional manner of identifying a device other than the registration number. The commenter suggested a VIN-type system or simply etching the manufacturer's serial number on a substantial component of the small UAS.

Several commenters proposed various electronic means to aid in small unmanned aircraft identification. Washington State Department of Transportation, Aviation Division and Drone Labs proposed having the registration numbers transmitted as part of the transponder signal or other means. The Center for Democracy and Technology advocated for an unmanned aircraft to emit a signal, such as a radio signal, to aid in identification. SkyView Strategies, Inc., recommended a microchip on each unmanned aircraft programmed with the registration number so that a device, such as a smart phone app, could read the microchip and display the aircraft's registration number. SkyView recognized this requirement could not go into effect until it is technologically feasible.

Several commenters opposed the requirement that small unmanned aircraft display their registration numbers because it would be impractical due to the small size of the aircraft. Some of those commenters, including the Association for Unmanned Vehicle Systems International, noted that many small unmanned aircraft have limited surface area available and often have no adequate fuselage for placement of registration markings. Those commenters said the FAA should develop alternative means of displaying a registration number more conducive to small unmanned aircraft. An individual commenter pointed out that for small unmanned aircraft with no ''hull'' or fuselage, the only place available for markings is on the booms, which are not permanently attached to the hub plate. Thus, the commenter noted, the marking would not be permanent, but, rather, on an ''easily removed and easily replaced'' component. Associated General Contractors of America said the requirement ''would serve little or no useful purpose'' because even when displayed in the ''largest practicable manner'' such numbers would be invisible from anything more than a few feet away.

Kansas State University UAS Program said the final rule should describe acceptable means for locating registration markings for nontraditional aircraft (or reference an industry consensus standard that does so) that cannot meet current subpart C in part 45 requirements. Prioria Robotics, Inc. also expressed concern about the applicability of the markings requirement to certain small unmanned aircraft airframes, and questioned whether, if a vehicle undergoes repair and a fuselage is changed, the operator will need to re-register the aircraft.

Several commenters recommended the sUAS operator make the aircraft's registration number visible to others on the ground. Trimble Navigation Limited and Federal Airways & Airspace favored having the sUAS operator display an ID badge with the registration number of the aircraft on their person. Trimble Navigation clarified that a badge display would be helpful if the FAA intends to use registration of an aircraft to identify the operator, but that visual or electronic identification of the aircraft is appropriate if the intent is to assist in the investigation of accidents. Federal Airways & Airspace clarified that this may be useful for very small unmanned aircraft but may not be necessary if the unmanned aircraft is large enough to display markings to the standard size. Predesa, LLC stated that the sUAS operator should be required to post aircraft registration information in their vicinity on the ground.

Regarding whether the rule should require small unmanned aircraft to have a fireproof identification plate, as required by part 45 subpart B, the Small UAV Coalition, Aviation Management Associates, Predessa, LLC, and the University of North Dakota's John D. Odegard School of Aerospace Sciences agreed with the FAA that a requirement for small UAS manufacturers to install a fireproof identification plate would not be cost-effective. The National Business Aviation Association, DJI, Modovolate Aviation, LLC, and several individual commenters also agreed that fireproof plating should not be required.

Crew Systems, on the other hand, said small unmanned aircraft should have a data plate installed, as required by 14 CFR 45.11. Aerospace Industries Association also said UAS manufacturers should install fireproof identification information on every unmanned aircraft, ''[p]erhaps through an electronic device (*i.e.,* imbedded chip) or other easy-to-read and damage-resistant means of identification.''

Other commenters addressed the need for ''indestructible'' identification plates, although they did not comment specifically on whether small UAS manufacturers should be required to attach fireproof identification plates in compliance with subpart B of part 45. The Air Line Pilots Association said a fire proof plate should be attached to the small UAS ''as a permanent identification of the registration of the sUAS.'' The Civil Aviation Authority of the Czech Republic said a fireproof identification plate should be required and enforced according to ICAO Annex 7, which requires the nationality, registration mark, and operator name and phone number. The National Agricultural Aviation Association, Colorado Agricultural Aviation Association, and CropLife America said small UAS should have a registered N-number on ''an indestructible and unmovable plate'' attached to the UAS for identification in case of an accident or incident. Reabe Spraying, Inc. said each UAS should have an ''indestructible and non-removable data tag with a unique ID code.'' Texas A&M University Corpus Christi/LSUASC said that if the registration number is not easily displayed on the aircraft, then an ''identifying tag'' should be permanently attached to the small UAS. The Aircraft Owners and Pilots Association said the FAA should implement ''additional requirements'' to ensure that a UAS can be identified in the event of an accident, incident, or violation, but the commenter did not specify what those additional requirements should be.

The Motion Picture Association of America, Inc., the National Association of Broadcasters, National Cable & Telecommunications Association, and Radio Television digital News Association, and the International Association of Amusement Parks and Attractions favored not having registration marks on small unmanned

aircraft that will be seen in theatrical and television productions.

Clarification/Request for Information: In addition to the comments on identification and marking provided in response to the sUAS Operation and Certification NPRM, the agency also received comments on aircraft identification and marking in response to the clarification/Request for Information. The Clarification/Request for Information sought specific information pertaining to aircraft identification and marking. Specifically, the document asked for information regarding methods currently available for identifying unmanned aircraft, whether every unmanned aircraft sold has an individual serial number, and methods to identify unmanned aircraft sold without serial numbers or those built from kits.

Information that may be used for aircraft identification: Commenters said that no standard method of aircraft identification exists for UAS and they recommended ways to identify UAS for registration purposes. Chronicled, Inc., wrote that it explored several options for including unique identifiers in consumer products, including serial number, radio frequency identification (RFID), near field communication (NFC), Bluetooth low energy (BLE), QR code, and DNA marker. This commenter determined that serial number or encrypted (PKI) microchips are the best options currently available and recommended the agency initially require the use of serial numbers for registration and then over a two year period, require PKI microchips to be included in all UAS. Aerospace Industries Association said various methods to identify platforms exist, but recommended that FAA seek to collect as much information as possible. According to this commenter, high value commercial platforms have a serial number to manage warranty claims while other commercial platforms, at a minimum, have a stock keeping unit (SKU) that can be used to identify the product model number. Morphism, LLC recommended using identifiers that encode information regarding the type of airframe, operating limitations and operators' contact information. Researchers at the University of California, Berkeley said UAS should receive and display an identification code to enable people and other aircraft to identify them. These researchers developed an identification system based on LEDs and unique color sequences. NetMoby, Inc. recommended that FAA adopt the Federal Communications Commission's registration process and tailor it to meet FAA's needs.

Several commenters noted that many UAS are assembled by consumers using parts from a range of sources, which presents a challenge for identifying individual products. Additionally, UAS components are frequently modified, replaced or upgraded. Some commenters recommended that the registration system require use of either a serial number for UAS that have serial numbers, or an FAA-generated identification number that can be applied to the UAS for those without serial numbers. Other commenters recommended that FAA issue a single registration number to the UAS operator rather than to each aircraft because hobbyists often have dozens of aircraft and it would be too burdensome to register every aircraft they buy or build. Several AMA members suggested the agency allow AMA members to place their names and addresses or AMA numbers on their aircraft as an alternative means of complying with the registration requirement.

Another individual suggested identifying consumer grade UAS by serial number and hobby built UAS by radio transmitter and receiver. A number of commenters participating in a form letter campaign stated that ''there is fundamentally no way to define any major component on a model aircraft that could reasonably be registered.''

Commenters addressing whether each unmanned aircraft sold has a unique serial number generally stated that every unmanned aircraft sold does not have individual serial numbers, though some UAS do. The University of Illinois at Urbana-Champaign said serial numbers are not required on UAS and they are not required to be distinct across manufacturers, so the agency could not rely on them for identifying UAS. Modovolate Aviation, LLC said most UAS have serial numbers and asserted it would impose a relatively small burden on manufacturers to imprint a serial number as part of the manufacturing process. A law firm suggested the agency require manufacturers assign a serial number to all UAS operated in the United States. This commenter also said that products manufactured before this requirement and other UAS without serial numbers could be assigned a registration number by FAA and the number would be affixed to the UAS. Delair-Tech suggested if no serial number is available for the UAS, the serial number of the autopilot module should be used. The Retail Industry Leaders Association said most UAS models on the market today do not contain product-specific unique identification numbers that consumers can use when registering UAS. This commenter noted manufacturers will need time to implement process changes to incorporate identification numbers and urged the agency to take the time to work with manufacturers with respect to this requirement. The commenter cautioned that if FAA adopts the registration requirement without waiting for manufacturers to make the necessary process changes, the only information consumers will be able to provide during registration is the model or inventory number of the UAS, which will not be helpful to identify a UAS owner involved in an incident.

Commenters suggested various methods for identifying UAS sold without serial numbers or those built with kits. The Wireless Registry suggested including a UAS' wireless signal identifier as part of the information collected as part of the registration process. The commenter explained the UAS' MAC address, a wireless identifier that cannot be altered, tied to a specific device would enable FAA to match the UAS to other information in the registry, including operator information. An individual stated the FCC already requires that all model aircraft operate on a very narrow frequency band and UAS manufacturers adhere to those rules. This commenter suggested FAA and FCC work together to establish a method of encoding each radio system with an identifier that would enable the FAA to monitor airspace in which UAS are not allowed. The Air Medical Operators Association said any UAS with the potential to conflict with a manned aircraft in flight must possess a unique identification that can allow for registration. This commenter also recommended that product packaging should clearly inform the consumer of his or responsibilities as operator. Other commenters suggested the following methods for identifying UAS sold without serial numbers or those build from kits:

Digital photo.
Detailed description of aircraft (*e.g.,* black quadcopter, white hexcopter).
QR code with 8-digit unique alphanumeric identifier that can be affixed to aircraft.
RFID tags or transponders.
FAA-issued registration number.
Name and address or AMA number affixed to the inside or outside of the airframe.

Methods to display aircraft identification: Several people commented on how operators should

display markings of their registration number on the UAS. Commenters' recommendations included: registration numbers should be prominently displayed on the exterior of the unmanned aircraft and be sized based on the largest single dimension of the unmanned aircraft; the markings should be visible from the ground; registration numbers should be displayed using a placard of some sort, or bar code, placed on the aircraft; and registration markings should be replaceable because UAS operators change parts on a regular basis. A number of commenters suggested using a sticker similar to automobile registration tags, which would provide visual confirmation of compliance and allow for consistency of data. Other commenters expressed concern about required markings adding weight to their unmanned aircraft or ruining the appearance of their scale models of real aircraft.

One commenter recommended a registration system in which individuals can request from the FAA a reasonable number of stickers that are pre-printed with successive serial numbers, and the FAA will then record to whom those stickers were sent in a publicly accessible database. The individuals can then apply those serial-numbered stickers to any model aircraft they own. The commenter contemplated that the stickers will self-destruct if the owner attempts to remove them to reuse them on a different aircraft. The commenter also suggested that if an aircraft is destroyed or sold, the original owner can log onto the FAA database to update the information associated with that aircraft's serial number.

Several other commenters noted that a marking system is problematic because many aircraft do not have a large enough area on which to place an identifier that would be visible from a distance. Some of these commenters stated the only reason for a unmanned aircraft to carry a registration number is to identify the owner after a crash. These commenters asserted that it would make more sense to require UAS operators to affix a label with their contact information inside their aircraft than to develop and implement a registration system. Noting markings will not be visible on most unmanned aircraft during flight, Delair-Tech recommended using a position reporting mechanism to enable authorities to access information on in-flight devices. This commenter said following an accident, a marking of the manufacturer name, serial number and type designator, designed to withstand a certain degree of damage, would enable authorities to find the UAS owner through the registration system.

Comments on the use of the N-numbering system to register UAS: A few commenters recommended that the registration system for UAS be separate from the current N-numbering system used for manned aircraft. To ensure that the FAA does not run out of N-numbers, one individual suggested moving to a 6- or 7-digit number for UAS, while another individual suggested the FAA open up the first 3 spaces to allow the use of letters, which the commenter asserted will increase the availability of the numbers by 44,279,424 spaces. Another individual said the registration number should be ''sufficiently long/random'' to prevent people from creating registration numbers without actually registering.

One individual commenter suggested that the registration numbering system delineate between commercial users (for which the N-numbering system could be used) and private users. Another individual said the N-number given to small UAS intended for commercial use should be followed by a ''- C'' designation to clearly show that this aircraft is going to be used commercially. Several other individuals recommended the FAA use alternate prefixes for the registration number (*e.g.,* ''U,'' ''UX,'' ''UAS,'' ''UAV,'' ''NQ,'' or ''M'' for model aircraft).

The Property Drone Consortium pointed out that an N-number on a UAS will not be visible to observers while the UAS is in flight, and will therefore only be used to identify the owner of a UAS that has been involved in an incident and recovered. This commenter also questioned whether it will be sufficient to self-register based on a serial number, requiring an FAA assigned N-number only when a serial number is not available or easily accessible. An individual commenter said the manufacturer serial number should be sufficient for identification purposes, instead of a separate N-number. Another individual also supported the use of a manufacturer serial number, but said an ''N'' should still be placed in front of the serial number to show that it is registered.

One individual commenter stated that because some UAS are too small to effectively display an N-number, an electronic version of an N-number should be used. This commenter asserted that the electronic serial number (ESN) can be encoded into the receiver/transmitter used to control the UAS, and then broadcast whenever the transmitter commands the aircraft. The commenter suggested that authorities could then identify the UAS in question, and that that interception would be legal as the ESN is broadcast over the 2.4 GHZ publicly shared frequencies.

One individual commenter recommended a separate category of N-numbers for historic airplanes, similar to what has been done for full-scale historic cars and aircraft.

A few individual commenters supported the use of the current N-numbering system for UAS, with one commenter asserting that it is already working well for commercial UAS operations.

Task Force: The FAA asked the Task Force to develop and recommend methods for proving registration and marking. Factors to consider included, but were not limited to, how a small unmanned aircraft will be able to be identified with the registered owner (*i.e.,* a marking requirement).

Information that may be used for aircraft identification: Because the main goal of registration is to create a connection between the aircraft and its owner, the Task Force recognized that it is necessary to mark each registered small unmanned aircraft with a unique identifier that is readily traceable back to its owner. The Task Force recommended two options for complying with this marking requirement. Specifically, registrants can either affix a single FAA-issued registration number to all the aircraft they own or they can rely on a manufacturer's serial number that is already permanently affixed to the aircraft. A small unmanned aircraft owner may only rely on the manufacturer's serial number, however, if the owner provided that serial number to the FAA during registration and if it appears on the owner's certificate of registration.

Methods to display aircraft identification: The Task Force further recommended a requirement that the owner and operator ensure that all markings are readily accessible and maintained in a condition that is readable and legible upon close visual inspection prior to any operation. The Task Force believed that markings enclosed in a compartment, such as a battery compartment, should be considered ''readily accessible'' if they can be easily accessed without the use of tools.

IFR Requirement: Information that may be used to identify an aircraft. The IFR requires all small unmanned aircraft to display a unique identifier. As discussed throughout this preamble, individuals registering aircraft that will be used exclusively as model aircraft will receive a Certificate of Registration

with a single registration number that constitutes registration of all of the individual's small unmanned aircraft. This number must be displayed on each small unmanned aircraft owned by this individual and used exclusively as model aircraft as proof of registration and to connect the small unmanned aircraft with an owner.

Each aircraft used as other than a model aircraft will receive a Certificate of Aircraft Registration with a unique registration number that must be displayed on the aircraft.

The FAA received a variety of recommendations pertaining to the information that should be affixed to the small unmanned aircraft for purposes of identification (*e.g.,* phone numbers, bar codes, QR codes, operator contact information and AMA number). In some cases, commenters recommended information in addition to a registration number. The agency considered these recommendations but determined that once an aircraft is registered, the registration number provides sufficient information to locate the aircraft's owner in the FAA's registration database. Therefore, requiring the owner to display additional contact information on the aircraft would create an unnecessary burden.

Regarding the comment seeking to display an AMA number in particular, the Civil Aircraft Registry and the registration system implemented in this IFR are premised on the ability to uniquely identify and owner and their aircraft. The FAA does not govern the membership structures of section 336 organizations and cannot be assured of the uniqueness of those organizations' identification systems. Therefore, the FAA has no assurance that such a member number will provide the requisite unique identifier. Thus, the FAA will maintain an FAA-issued registration number for the marking scheme for small unmanned aircraft used as model aircraft.

With regard to ASTM consensus and marking standards, the FAA notes that, as of this writing, those standards are still in development, and thus, they cannot be used for this rulemaking.

Finally, a number of commenters assumed that an FAA registration number would include the ''N'' prefix that is used for identification of U.S. registered aircraft. The agency clarifies that the registration numbers issued to small unmanned aircraft under the IFR are not intended to be used for nationality identification and thus will not include the ''N'' prefix because the part 48 registration process is available only to small unmanned aircraft operating within the United States.

Methods to display aircraft identification: To ensure that the small unmanned aircraft can be identified, the FAA will require that the unique identifier must be maintained in a condition that is legible. The unique identifier must be affixed to the small unmanned aircraft by any means necessary to ensure that it will remain affixed to the aircraft during routine handling and all operating conditions.

For small unmanned aircraft registered under this part, the FAA does not specify a particular surface upon which the unique identifier must be placed. Rather, recognizing commenters' concern about the small size of many of the small unmanned aircraft that must be registered, the FAA simply requires that the unique identifier must be readily accessible and visible upon inspection of the small unmanned aircraft.

In accordance with Task Force recommendations, a unique identifier is deemed readily accessible if it can be accessed without the use of any tools (*e.g.,* battery compartment). This flexibility is expected to resolve the concerns of the television and motion picture industry and preserve the authenticity of a replica if so desired, given that the unique identifier need not be displayed on the exterior of the small unmanned aircraft.

Additionally, the flexibility with respect to the location of the unique identifier will facilitate the use of a small unmanned aircraft serial number as the unique identifier at such time as the Administrator determines that serial numbers can be effectively used to identify aircraft owners within the small unmanned aircraft registration system. The FAA notes that, currently, serial numbers may be repeated since there is no mechanism in place for manufacturers to ensure that a given serial number is unique to a specific aircraft. However, the FAA supports any efforts by sUAS manufacturers to collectively standardize aircraft serial numbers, such that each small unmanned aircraft will receive a unique serial number in production.

With regard to comments on the visibility of the markings, the FAA cannot require all small unmanned aircraft to display a registration number visible to people on the ground because some small unmanned aircraft may be too small to satisfy this requirement. The agency notes, however, that during operation of the sUAS, a Certificate of Aircraft Registration must be readily available to the person operating the sUAS, so that they may provide it to federal, state, or local law enforcement when requested. *See* 49 U.S.C. 44103(d); 14 CFR 91.9(b) and 91.203(a); *see also* Legal Interpretation from Mark W. Bury to John Duncan, August 8, 2014. The Certificate of Registration can be a legible paper copy (or photocopy), or it may be provided by showing it in a legible electronic form, such as on a smartphone. Thus, while the agency considered comments suggesting additional documentation requirements such as an ID badge or placard on or near the sUAS operator, the FAA has determined that such requirements would not serve a valid purpose.

Additionally, commenters' recommendations pertaining to a requirement to identify a small unmanned aircraft using certain equipment are beyond the scope of this rule. Neither the sUAS Operation and Certification NPRM nor this rule contain minimum equipage requirements for small UAS, such as a transponder. Thus, small unmanned aircraft may not have the equipage necessary to electronically transmit a registration number.

Regarding comments related to the installation of fireproof plates, Executive Order 12,866 prohibits an executive agency from adopting a regulation unless the agency determines ''that the benefits of its intended regulation justify its costs.'' [38] In the sUAS Operation and Certification NPRM, the FAA explained its belief that requiring the installation of identification plates would not be cost-justified. None of the commenters advocating for the use of fireproof identification plating or other forms of fireproof marking submitted data that would allow the FAA to find that adopting this requirement would result in benefits sufficient to justify the costs of this requirement. Additionally, the FAA notes that for some of the smaller and lighter weight unmanned aircraft that operate under this rule, an identification plate would add additional weight, which could result in reduced flight performance and/or endurance. Accordingly, the FAA has decided against including a requirement for a fireproof identification plate in this rule.

I. Education

sUAS Operation and Certification NPRM: Availability of education materials was addressed in the sUAS Operation and Certification NPRM. The National Association of REALTORS, SkyView Strategies, Inc., and others recommended that FAA initiate a campaign to educate the general public on UAS due to the abundance of misinformation currently available. The Air Line Pilots Association urged FAA to take advantage of internet-based

communication of safety material, training resources, databases of airport locations and airspace restrictions, best practices, in-service irregularity reports and the like, because this is possibly the only practical means of reaching the small UAS pilot population.

Clarification/Request for Information: Many commenters, including the National Air Transportation Association (NATA) and the National Retail Federation, stated that a public education campaign and the development of guidance materials and handbooks to ensure users know the rules for flying UAS is essential to promote responsible use of UAS. Other commenters said that requiring manufacturers to include a pamphlet with each aircraft that describes these rules would also be effective. Another commenter suggested that online retailers require purchasers to navigate to a page describing UAS safety requirements before completing the purchase. Many commenters, including the Experimental Aircraft Association, lauded FAA's existing Know Before You Fly program and recommended continuing to expand it. Some commenters suggested creating a GPS-enabled app that would identify safe and unsafe areas for flying, while others said FAA should further develop its existing B4UFly app for all mobile platforms. A commenter said that off-limit areas should be marked or advertised as such. Some commenters said that operators should be required to pass a training course, a practical exam, or obtain an operator certificate before flying a UAS.

Task Force: Recognizing how important it is that all users of the NAS receive information on safety in the NAS, the Task Force recommended the registration process contain some sort of education component and acknowledgment, with controls in place such that the registration process would be incomplete until the registrant has acknowledged receipt of this information. The information provided could be similar to the existing content in the *Know Before You Fly* program.

IFR Requirement: The FAA establishes regulatory standards to ensure safe operations in the NAS. The FAA's safety system is largely based on, and dependent upon, voluntary compliance with these regulatory standards. An essential element of this strategy is FAA's effort to encourage a safety culture, and, to that end, ensure comprehensive educational material is readily available to every user of the NAS. The FAA agrees with commenters and the Task Force with respect to the importance of educational information in the registration process.

The small unmanned aircraft registration platform described in this rule will require the registrant to review a summary of sUAS operational guidelines before completing small unmanned aircraft registration. The FAA believes this is an invaluable access point to deliver sUAS operational safety information. The information will also direct registrants to additional sources of safety information generated by the FAA and other stakeholders, such as *faasafety.gov* and *knowbeforeyoufly.org.*

To reach registrants after they complete the registration process, the FAA will develop a process to use the small unmanned aircraft registry information (such as email and mailing address) to offer safety-related information. Delivering post-registration safety information to registrants on a continuing basis will help to remind the registrant of their safety-of-flight obligations and help reduce sUAS risks in the NAS. The FAA will develop, maintain, and deliver easily-accessible safety information directed specifically to sUAS owners and operators. To maximize usage of the information by the recipient, the FAA will carefully meter its delivery of information via these access points to maximize effective consumption.

J. Compliance Philosophy and Enforcement

Clarification/Request for Information: The FAA received several comments about enforcement. Modovolate Aviation, LLC expressed support of FAA's proposed registration requirement of UAS stating it will improve the ability for law enforcement officials ''to investigate unsafe and reckless practices and to take enforcement action when appropriate.''

The Minnesota Department of Transportation's (MnDOT) Office of Aeronautics, the Arlington Police Department (APD) and several individual commenters raised concerns about enforcing a registration requirement. MnDOT Office of Aeronautics noted one challenge associated with enforcement of the current program is a general lack of awareness of the State's role in regulating UAS and aviation, as well as a lack of awareness among operators, airports, law enforcement and the general public of the aircraft registration requirements and commercial operators licensing requirements. This commenter noted that registration could be used as a vehicle for providing information to the public about program requirements and the States in regulating UAS and aviation

APD said it and other local law enforcement agencies across the country do not have the capacity or the authority to enforce FAA's UAS rules and regulations. While APD will assist the FAA as witnesses or reporting entities for UAS rules violations, the commenter said the FAA must retain the responsibility for enforcement.

A number of individual commenters raised general concerns about the enforceability of a registration requirement. Several commenters asserted extending registration requirements to recreational users will be difficult to enforce and will not be worth the expense required to develop and implement the program, including the cost to train local law enforcement officials. Others noted no Federal, State or local law enforcement agency has the budget or work force to enforce a registration requirement for all aircraft, including model aircraft. One commenter compared this registration requirement to the Federal Communications Commission's effort to require Citizen Band radio users to apply for a license to operate, which, according to the commenter, ultimately was too costly to enforce. Other commenters questioned whether the FAA has sufficient manpower to enforce the registration requirement and how enforcement responsibilities will be shared with local law enforcement.

Some individuals provided general comments about penalties for failing to register a UAS. One commenter recommended a one-time allowance for anyone caught violating the registration requirement and a large fine for subsequent violations, while other commenters suggested a large fine for all offenses.

Several commenters addressed the issue of penalties. One commenter remarked that registration will be worthless unless there are negative consequences (*e.g.,* fines or revocation of registration certificate) for operators who fail to register or mark their aircraft. Another commenter suggested that a penalty similar to the penalty for driving an unlicensed car be imposed for operating a UAS without the proper registration.

Task Force: The Task Force recommended that the FAA establish a clear and proportionate penalty framework for violations. It cited the FAA's current registration-related penalties and stated they were established in order to deter suspected drug traffickers and tax evaders who failed to register aircraft as part of larger nefarious schemes. The Task Force

recommended a separate FAA policy driving a proportionate response for inadvertent sUAS registration violations, without which operators could find themselves exposed to aggressive enforcement.

FAA Response: The FAA Administrator has the authority to prescribe, revise, and enforce standards in accordance with Title 49 of the United States Code, Subtitle VII, Chapter 447, Safety Regulation. This authority is used to protect the public's safety and the agency's enforcement authority is exercised to obtain compliance with applicable aviation safety and security requirements.

Earlier this year, the FAA announced a new compliance philosophy that uses a strategic approach to safety oversight.[39] The FAA believes that its compliance philosophy, supported by an established safety culture, is instrumental in ensuring both compliance with regulations and the identification of hazards and management of risk. If an individual or entity is found to have not registered the aircraft prior to its operation, the FAA's compliance philosophy will be applied appropriately.

To mitigate risks in the NAS and ensure compliance FAA has used and will continue to use outreach and education to encourage compliance with regulatory requirements that pertain to the registration of unmanned aircraft. The FAA may also use administrative action or legal enforcement action to gain compliance. Failure to register an aircraft can result in civil penalties up to $27,500. Criminal penalties for failure to register can include fines of up to $250,000 under 18 U.S.C. 3571 and/or imprisonment up to 3 years. 49 U.S.C. 46306.

K. Privacy

sUAS Operation and Certification NPRM: In the NPRM for the sUAS Operation and Certification rule, one commenter addressed database accessibility. Event 38 Unmanned Systems suggested that FAA create a database of registered operators, but limit accessibility to FAA and law enforcement.

Clarification/Request for Information: The Clarification/Request for Information requested information about the storage of registration data.

Registration Data Storage Method: Many commenters expressed concern about the security of personal identifying information in light of recent breaches, and recommended that data be stored in some sort of secure database (*e.g.,* encrypted database, secured server, database under the control of FAA, central database with 256 bit AES digital encryption, protected with HIPAA-type controls) in compliance with government requirements. Several commenters noted the data should be stored in a nationally accessible database so that it can be shared with local law enforcement agencies responsible for enforcing the rules. Other commenters recommended the FAA store registration data the same way the FCC stores amateur (HAM) radio licenses. Another commenter suggested registration data for model aircraft should be maintained by the AMA. Some commenters said there should not be a central registry due to data security concerns, while others recommended storing the registration information on paper to reduce the possibility of personal information being hacked or stolen.

EPIC stated that recreational UAS operators have an expectation of privacy, so the FAA should adopt safeguards to protect those registrants' information from improper release and use by both the public and other government agencies.

Multiple commenters, including South Florida UAV Consortium and Morris P. Hebert, Inc., expressed concern with the security of online registration systems. Some commenters indicated that they would be supportive of electronic or Web-based registration if the agency could guarantee that the registration site would be secure. A commenter also suggested to ensure that an electronic signature be included in the registration process to increase security. Along with adding security measures to any online site, an individual expressed concern with the authentication process of online registrations. A few commenters suggested that it would be difficult for the agency to create and implement an authentication program sufficient to verify the identity of those registering prior to the proposed December 2015 deadline.

The Air Medical Operators Association and the Colorado Agricultural Aviation Association said the data should be stored and maintained by the FAA and easily accessible to the agency and law enforcement agencies for enforcement purposes. The National Retail Federation asserted retailers should not be required to store any kind of UAS registration information; the system should be maintained by the FAA for use by the FAA and local law enforcement agencies. Similarly, the Toy Industry Association said manufacturers should not be required to maintain UAS registration information.

Chronicled, Inc. suggested using a distributed blockchain based system in which the FAA would not own the data, but would have complete access to the data. In a blockchain-based system, the registrants would own their registration data and the UAS product history would pass on to any subsequent owners of the UAS. Travelers Insurance Company recommended the data be stored in a searchable database that would allow for data mining with respect to all the registration information, including manufacturer, type, serial number, vendor and purchaser with protections for personally identifiable information.

Registration Data Accessibility: In the Clarification/Request for Information, DOT and FAA asked who should have access to the registration data. Many commenters, including Modovolate Aviation, LLC, and NetMoby, said that the UAS registration data should be available to the public via the same search methods as the current manned aircraft registration data. Many commenters noted the data must be available to the public in order for the public to identify the owner of a UAS involved in an incident and to notify the appropriate government authority. NetMoby also said State laws require the exchange of information for automobile accidents and asserted the same should be required for UAS incidents.

Aerospace Industries Association, Property Drone Consortium, Real Time Technology Group and individual commenters suggested all stakeholders require access to the data, but different stakeholders have different information needs. These commenters said the type of information each stakeholder should have access to should be controlled on a need to know basis. Aerospace Industries Association also cited FAA's Federal Records Center (FRC) as an example of how the data could be managed. The commenter explained licensees are registered and have access to their detailed information, while third parties have access to a limited amount of the information necessary to conduct business, but not to all of the detailed information. A law firm noted concerns about confidential proprietary information could be addressed by allowing for redaction of certain confidential financial information, as is currently done with the FAA Civil Aircraft Registry.

Several commenters said only the registrant and authorized government

[39] See FAA Order 8000.373 available at *http://www.faa.gov/documentLibrary/media/Order/FAA_Order_8000.373.pdf.*

agencies, including DOT, FAA, the National Transportation Safety Board, and Federal Bureau of Investigation, and local law enforcement officials should have access to the registration data because of privacy concerns. One commenter said the data should only be available to law enforcement and FAA personnel via the existing National Crime Information Computer datalinks. Some commenters said law enforcement officials should have access to this data only when there is an active investigation into a particular registration and registrants should be informed when their data is accessed. Many commenters said the data should be treated as confidential information and a few suggested DOT or FAA personnel should have the ability to access the data only with a court order, warrant or FOIA request. A few commenters expressed concern that if the registration data were publically available, owners of expensive UAS would be targets of robbery.

EPIC stated that there must be strict restrictions against the general disclosure of registrants' personal information to government agencies and private entities, except as necessary to promote the FAA's mission of establishing safety and privacy in UAS operations. Noting that privacy concerns are greater for hobbyists (who are more likely to register with private home addresses) than for commercial operators, EPIC recommended that the registration database of commercial operators be publicly accessible, but the database of recreational operators only be accessible for limited purposes related to protecting the safety and privacy of the public. EPIC claimed that, given the fast-growing market for UAS, a publicly accessible database of operators would implicate privacy and safety concerns comparable to those that inspired the Driver's Privacy Protection Act, which generally prohibits the release and use of registered drivers' personal information except for limited purposes. As such, EPIC asserted that UAS registration information should be treated the same as the driver records collected by state departments of motor vehicles.

The Arlington, Texas, Police Department said that local law enforcement agencies should be given real-time access to the database to enable them to seek information about a specific UAS registration and to provide notification about unregistered UAS.

Usage of Registration Data: Many of the commenters who responded to this question, including the National Retail Federation and individuals, said the data should only be used for law enforcement purposes. Other commenters suggested additional uses of the data. For example, Travelers insurance company recommended the data be available for use for underwriting, risk assessment, and for establishing loss history. AIA said regulators could use the metadata to determine market size, concentration and type and volume of operations. Aerospace Industries Association also said registration should not prompt additional State tax collection processes as it does with manned aircraft purchases. Real Time Technology suggested the data could be used at FAA's discretion for a number of purposes, including: To maintain an accurate association of UAS with multiple users over time; to compile accurate records of corporate UAS assets; to assure compliance with registration requirements for UAS operations; to authenticate registration for operational integrity in the field; to track incidents associated with UAS or owners; and to collect operational flight data from participating facilities. An individual said FAA could use the data to generate aggregate statistical data on commercial UAS activities to gauge commercial UAS impact on the NAS. A few commenters noted registration data could be used to recover stolen or lost property, alert owners of recalls, or to disseminate safety information, including Notices to Airmen, to registrants. Some commenters expressed concern that registration data could be used to abuse or harass UAS owners. Others expressed concern that in asking how the data should be used, the agency does not seem to know why it is seeking to collect the data.

EPIC stated its position that recreational operators have a legitimate privacy interest in avoiding the disclosure of their names, addresses, and telephone numbers, and that it would serve no legitimate purpose to make such personal information available beyond the scope of a particular privacy or security threat.[40] As such, EPIC stated the FAA should adopt a general prohibition against the disclosure of personal information, including the name, address, and number of the registration. EPIC further stated that permitted uses of the registry should be limited to serve the FAA's stated purposes of allowing ''individuals and title search companies to determine the legal ownership of an aircraft'' and to ''provide aircraft owners and operators information about potential mechanical defects or unsafe conditions of their aircraft in the form of airworthiness directives.'' To that end, EPIC suggested that appropriate uses of registration data by the FAA would include providing information to identify the operator of a UAS that has caused injury, or in connection with a legal proceeding, and providing UAS owners and operators information on any relevant mechanical defects or unsafe aircraft conditions.

Other General Comments: Commenters raised additional concerns regarding a UAS registration system. Skyward, Inc. said in 2013 the DOT's Office of the Inspector General found that the aircraft registration system had experienced significant data quality and security issues. The commenter noted data quality and security issues are exacerbated when data are hard to update or there is little incentive for individuals to provide updated information. Skyward, Inc. was ''concerned (1) that the Department's focus on enforcement may alienate potential registrants, (2) about questions related to managing registration of aircraft owned by individuals who are not US citizens or are not permanent residents, and (3) about how such a registration system may manage [s]UAS that are passing through the US by visitors who bring drones into the US temporarily.''

Skyward, Inc. also expressed concern about unintended consequences that could result from ''hasty implementation'' of the registration system. Similarly, an individual stated that based on the questions posed in the Clarification/Request for Information, it appears ''the FAA has not done the necessary preparation to stand-up a registration system to handle the necessary volume of registrants.''

Task Force: The Task Force recommended that the FAA collect only name and street address of applicants for registration. While the Task Force recognized that a registrant's email address and telephone number may be useful for the FAA to disseminate safety-related information to UAS owners, the Task Force nevertheless believed disclosure of such information be optional. With the exception of information released to law

[40] EPIC cited legal precedent to support the propositions that individuals have a legitimate privacy interest in avoiding disclosure of their names, addresses, and telephone numbers (*see Dep't of Defense* v. *Fed. Labor Relations Auth.,* 510 U.S. 487, 500 (1994)) and that this privacy interest remains intact even when the information is properly disclosed to the public under certain circumstances (*see U.S. Dept. of Justice* v. *Reporters Comm. for Freedom of the Press,* 489 U.S. 749, 767, 770 (1989)). EPIC further stated that limiting the use and disclosure of personal information submitted by registrants is consistent with their expectations of privacy.

enforcement, the Task Force urged the FAA to prevent the release of any personal information that the agency is not specifically required by law to disclose. Because this new requirement will impact unmanned aircraft owners who do not have the means to protect their identities and addresses behind corporate structures (as some manned aircraft owners currently do), the Task Force believed that it is important for the FAA to take all possible steps to shield the information of privately owned aircraft from unauthorized disclosure, including issuing an advance statement that the information collected will be considered to be exempt from disclosure under the Freedom of Information Act.

IFR Requirement: This rule provides a Web-based process for registration of small unmanned aircraft and issuance of Certificates of Aircraft Registration. The privacy impacts have been analyzed by the FAA in the Privacy Impact Assessment (PIA) for the Civil Aviation Registry Applications (AVS Registry) and the Privacy Act System of Records Notice (SORN) DOT/FAA 801 Aircraft Registration System has been updated accordingly.

The FAA conducted a PIA of this rule as required by section 522(a)(5) of division H of the FY 2005 Omnibus Appropriations Act, Public Law 108–447, 118 Stat. 3268 (Dec. 8, 2004) and section 208 of the E-Government Act of 2002, Public Law 107–347, 116 Stat. 2889 (Dec. 17, 2002). The assessment considers any impacts of the rule on the privacy of information in an identifiable form. The FAA has determined that this rule would impact the FAA's handling of personally identifiable information (PII). As part of the PIA that the FAA conducted as part of this rulemaking, the FAA analyzed the effect this impact might have on collecting, storing, and disseminating PII and examined and evaluated protections and alternative information handling processes in developing the rule in order to mitigate potential privacy risks. The PIA has been included in the docket for this rulemaking.

The FAA agrees with the Task Force that accessibility of this information to law enforcement and the FAA is the utmost priority in establishing this registry. As such, the security, simplicity, and accessibility of the system to those groups were the foremost goals in the FAA's determinations of system design. Routine uses are described in the SORN.[41]

Commenters were mainly concerned with two issues: information security and access to the registry information. First, regarding the security of the registry information, the FAA developed this Web-based registration system in compliance with all federal information technology requirements and guidelines regarding security and protection of information including the Federal Information Security Management Act of 2002 as amended by the Federal Information Security Modernization Act of 2014 and OMB and National Institute of Standards and Technology guidelines. Access to the system depends on a validated email address and a password created by the user. The system is identified by a digital certificate so that the public has confidence that they are interacting with the authentic registration site. The system encrypts all of the information provided by the users while they use the system as well as user information stored within the system. The system has also been designed to protect information based on the potential for serious impact from a security compromise. In addition, the system protects credit card information in accordance with PCI Data Security Standards.

Second, regarding the accessibility of the system data, the Privacy Act System of Records Notice DOT/FAA 801 Aircraft Registration System, provides notice to the public of the agency's privacy practices regarding the collection, use, sharing, safeguarding, maintenance, and disposal of information that affects individuals and their personally identifiable information (PII). The SORN identifies the routine uses for the PII collected for small unmanned aircraft registration. The SORN has been published in the **Federal Register** and addresses the disclosure of the small unmanned aircraft owner's name and address.

The FAA disagrees with commenters who say that the Registry should reside with the AMA or any other organization. By statute, the FAA is charged with establishing such a registry.

As provided in the SORN, all information in the database will be available to law enforcement in order to achieve one of the FAA's primary priorities in creating this system, which is to ensure a safe and secure NAS. Accomplishing this goal involves prioritizing the ability of law enforcement to help us identify the owner of a sUAS that has violated an operating rule or has been used to either accidentally or intentionally endanger other NAS users or people on the ground.

Additionally, as provided in the SORN, the general public will be able to search the part 48 registry database by the unique identifier. The name and address associated with that unique identifier will populate in accordance with that search.

L. Other Methods To Encourage Accountability and Responsible Use of the National Airspace System

Clarification/Request for Information: The FAA received comments from many organizations and individuals on additional means beyond aircraft registration to encourage accountability and responsible use of UAS.

The agency received comments affirming the registration requirement as a method to encourage accountability and responsible use of UAS. The Air and Surface Transport Nurses Association said that a registration requirement would be a ''step in the right direction in terms of safety.'' EAA stated that while registration will create a system of accountability, safety is dependent on the knowledge and decisions made by UAS users. An individual commenter noted registration would help recreational operators to take UAS use seriously. Another individual stated requiring all operators to register their UAS and to obtain a pilot license are both necessary to document the aircraft are airworthy and the operators are properly trained in safe operation. Rotor Sport and other commenters recommended the FAA look to the AMA for guidance and counsel so that the agency can create policies that foster acceptable use and safety for the public while at the same time are intelligent and flexible to meet the needs of all model aviation stakeholders.

Most of the commenters addressing this issue asserted that a registration requirement would not encourage accountability and responsible use of UAS. Two of the main reasons given for this assertion were that registration would only be useful in rare cases when a registered UAS is recovered after an incident, and ''bad actors'' will simply not register. Several commenters, including the Competitive Enterprise Institute, noted registration numbers on a UAS would be invisible to those observing a reckless or malicious UAS operation, thereby limiting the enforcement benefits. These

[41] Persons wishing to access or comment on the System of Records Notice should consult docket No. DOT–OST–2015–0235.

commenters said FAA has not provided any evidence to demonstrate that registration of these aircraft will improve safety of the NAS or people on the ground. They believe the safety rules are important, but a registration requirement would have no effect on safety. One commenter noted registration of UAS will enable FAA to identify the operator in case of an accident, but it does not address the actual problem: untrained pilots operating in the NAS. This commenter stressed the importance of a type certificate stating, ''It certifies that the UAS is airworthy, and also requires a trained pilot to operate in the NAS.''

A few commenters asserted FAA has not been able to accurately track many of the 357,000 aircraft registered under the current registration program, and questioned the agency's ability to manage the registration of hundreds of thousands of UAS. A number of commenters participating in a form letter campaign stated that registration of model aircraft, in particular, ''would have had little to no effect on the few rogue pilots that have caused concern with the FAA and DOT and would only serve to prevent law abiding citizens from enjoying the freedom and liberty set forth by the US Constitution.'' Many commenters said instead of encouraging accountability and responsible use, a registration requirement would increase burdens on responsible operators, waste tax payer dollars, and punish those who follow the rules.

Several individual commenters asserted that the proposed registration requirement is unnecessary as the registration issue is already being addressed in the current section 333 exemption process and proposed part 107 (the sUAS Operation and Certification NPRM).

A few commenters proposing other methods to encourage accountability and responsible UAS use said that manufacturers should be required to install geo-fencing software in their models to prevent UAS from flying in restricted areas. Other commenters said they should be required to install transponders that would transmit the registration number.

Modovolate Aviation said the following would encourage accountability and responsible use of UAS: ''(1) Prompt promulgation of a general rule for sUAS, following the FAA's 25 February 2015 proposal; (2) streamlining and acceleration of the section 333 exemption process; and (3) eventual replacement of this system of regulation with one requiring vendor self-certification of specific technological safety features as a condition of sale.''

Delair-Tech recommended various options that would require the manufacturer to install software that would trigger the need to register before the UAS would be operational. The South Florida UAV Consortium recommended that UASs be restricted to a limited operation until the operator completes a training course and receives a code to unlock the software to allow it to fly its full range. An individual commenter said there should be an identification process that requires a name and address to be registered to a serial number before electronic operating software can be downloaded to the UAS.

Skyward, Inc. said the Task Force should examine approaches that promote safety ''by providing opt-in conduits for registrants to receive educational material, safety/recall information from manufacturers, insurance discounts, and other benefits.'' In addition, Skyward suggested that the proposed registration system serve as a facilitator for subsequent services such as automated delivery of temporary flight restrictions. Other commenters similarly recommended the registration system contain some sort of educational or training component. Aviation Management Associates said the FAA should encourage registration of all UAS (including those that are not required to register) by providing information and services of value, such as enabling operators to receive discounted insurance rates by virtue of meeting educational requirements that qualify for registration.

EPIC recommended that any UAS operating the NAS include a mandatory GPS tracking feature that would broadcast the location, course, speed over ground, and owner identifying and contact information, similar to the Automated Identification System (AIS) for commercial vessels. EPIC noted that, unlike with aircraft that are equipped with ADS–B, aircraft information about aircraft equipped with AIS is available to the public through freely available apps.

Union Pacific Railroad stated that it supports other reasonable measures to encourage accountability and responsibility in small UAS operations, including restrictions on any unauthorized commercial or recreational operations over certain safety-sensitive locations, such as railroad facilities.

Task Force: While the Task Force did not make a specific recommendation on encouraging accountability and responsible use of UAS outside the registration process, it asserted within its report that operator accountability and responsible use were its principal goals of registration. The NPRM did not request comment on this issue.

IFR Requirement: Accountability and responsible sUAS operation along with identification of the aircraft owner are the desired outcomes for this rule. While commenters provided a number of recommendations for further action toward these goals that are outside of the scope of this rulemaking, the FAA found that one predominant recurring theme addressed education regarding safe sUAS operations. As described in the preamble discussion pertaining to education, the FAA agrees that education is a key component for reaching the agency's aircraft registration goals and is an overarching tenet in ensuring the safety of the NAS. The FAA will continue to evaluate these additional methods recommended by the commenters for encouraging safe and responsible use among sUAS operators for future guidance material and rulemaking.

M. Legal Implications of the Registration Requirement

A number of comments were received to the Clarification/Request for Information regarding the legal implications of the registration requirement.

1. Comments addressing Section 336 of the FAA Modernization and Reform Act of 2012

Many commenters stated that the FAA's decision to require registration of model aircraft is in violation of section 336 of the FAA Modernization and Reform Act of 2012, Public Law 112–95, which stipulates that the FAA ''may not promulgate any rule or regulation regarding a model aircraft'' that meets certain criteria. Commenters pointed out that one such criterion is that the model aircraft be operated ''in accordance with a community-based set of Safety Guidelines and within the programming of a nationwide community-based organization.'' Commenters stated that the AMA is one such organization, and that the FAA must therefore exempt AMA members from the registration requirement. Other commenters stated more generally that FAA must identify all nationwide community-based organizations and exempt their members from any rule or regulation (including registration) when the aircraft is operated in accordance with a community-based set of safety guidelines.

The Competitive Enterprise Institute asserted that the FAA conceded in its interpretation of section 336 that ''a model aircraft operated pursuant to the terms of section 336 would potentially be excepted from a UAS aircraft rule,'' an interpretation that the commenter said ''would logically lend itself to a UAS aircraft registration rule as well.'' This commenter accused the FAA of ignoring both the plain language of the statute and its own interpretation of it, and asked the FAA to explain how it has the jurisdiction to regulate small UAS operated by hobbyists.

Several commenters found fault with the FAA's justification for requiring registration of model aircraft—*i.e.,* that it is applying existing law that applies to all ''aircraft'' and not promulgating new regulations regarding model aircraft. The Mercatus Center at George Mason University asserted that the current proceeding ''relied quite directly on laws that by statute may not be used as justification for an expansion of the regulatory obligations of model aircraft operators;'' namely, its UAS integration mandate under the FAA Modernization and Reform Act. This commenter further asserted that if the FAA does not restart the process without references to that mandate there is a possibility that registration of non-commercial UAS will be overturned if challenged in court. An individual commenter stated that if, as the FAA asserts, the definition of model aircraft as ''aircraft'' means that all existing federal aviation regulations retroactively apply to model aircraft, the congressional prohibition on regulating them would be pointless. This commenter further stated that the clear intent of Congress was to prohibit the FAA from regulating model aircraft at all, and that if Congress meant instead to apply the full array of existing aviation regulations to model aircraft, it would have said so. This commenter also asserted that, even if the FAA is correct that all existing aviation regulations apply to model aircraft, it is not acting consistently with that principle because it is picking only one of the many regulations that apply to manned aircraft and arbitrarily applying it to model aircraft. This commenter further asserted that this ''is the very epitome of arbitrary and capricious, and clearly shows that the FAA is being disingenuous when it claims it is merely applying existing regulations.'' This commenter went on to say that ''[t]he fact that the FAA finds it necessary to request public comments in a sort of expedited unofficial NPRM, followed by assembling a special Task Force (somewhat like an Advisory Rulemaking Committee (ARC) to determine what steps are necessary to implement the registration process, clearly reveals the FAA's proposal to be in fact a new regulation regarding model aircraft in direct contravention of [FAA Modernization and Reform Act] Sec. 336.''

Another individual stated that the FAA is not being forthright in averring that its decision not to register model aircraft until now was ''discretionary.'' This commenter expressed doubt that a regulatory document exists in which the agency explicitly stated that ''model aircraft need not be registered, as a discretionary exclusion from 49 U.S.C. 44101,'' and that if such a document does exist it should have been referenced in the Clarification/Request for Information. This commenter further asserted that the absence of such a document destroys the premise of the ''clarification'' the FAA has now put forth.

Two individual commenters challenged the agency's reliance on the NTSB ruling in *Administrator* v. *Pirker* (NTSB Order No. EA–5739), noting that the ruling only held that model aircraft qualify as ''aircraft'' as the term is used in 14 CFR 91.13(a), which prohibits careless and reckless operation.[42]

Two individual commenters stated that the FAA's authority to pursue enforcement action against persons who endanger the safety of the NAS (under section 336(b) of Public Law 112–95) cannot reasonably be interpreted to mean the agency has the blanket authority to mandate registration of model aircraft.

The FAA disagrees with the comments asserting that the registration of model aircraft is prohibited by section 336 of Public Law 112–95. While section 336 bars the FAA from promulgating new rules or regulations that apply only to model aircraft, the prohibition against future rulemaking is not a complete bar on rulemaking and does not exempt model aircraft from complying with existing statutory and regulatory requirements. As previously addressed, Public Law 112–95 identifies model aircraft as aircraft and as such, the existing statutory aircraft registration requirements implemented by part 47 apply.

This action simply provides a burden-relieving alternative that sUAS owners may use for aircraft registration. Model aircraft operated under section 336 as well as other small unmanned aircraft are not required to use the provisions of part 48. Owners of such aircraft have the option to comply with the existing requirements in part 47 that govern aircraft registration or may opt to use the new streamlined, web-based system in part 48.

2. Comments Addressing Requirements Under the Administrative Procedure Act

A number of commenters questioned the FAA's approach to rulemaking pertaining to small unmanned aircraft registration. Several commenters said the FAA does not have good cause to issue a rule without notice and comment. The Competitive Enterprise Institute (CEI) stated that under section 553(b)(3)(B) of the APA, agency rulemakings are required to include a notice and comment period of at least 30 days unless ''the agency for good cause finds (and incorporates the finding and a brief statement of reasons therefor in the rules issued) that notice and public procedure thereon are impracticable, unnecessary, or contrary to public interest.'' Citing to a legal treatise on administration law, CEI asserted that the good cause exception ''is not an escape clause,'' and ''should be narrowly construed and only reluctantly countenanced,'' with ''the agency bear[ing] the burden of demonstrating the ground for good cause.'' CEI further asserted that notice and comment in this case is not ''impractical,'' because ''[i]mpracticality exists when the agency cannot both follow the notice-and-comment procedure and execute its statutory duty.'' CEI stated that in this case the FAA is arguably proceeding with a UAS registration mandate in direct contradiction of its statutory duty ''not [to] promulgate any rule or regulation regarding a model aircraft.'' CEI also stated that the notice and comment process cannot be said to be ''unnecessary,'' because a rule that mandates hobbyists register their model aircraft creates a substantial new burden on the public. Finally, CEI stated that notice and comment is not ''contrary to public interest.'' CEI claimed that, although the FAA will presumably argue that providing notice and comment would result in significant harm to the public interest by failing to immediately mitigate UAS safety risks that only mandatory registration can address, ''there is little evidence that registration will, on its own, do much of anything to mitigate UAS safety risk, which itself is likely very low relative to other aircraft safety risks, such as birds.''

The Mercatus Center at George Mason University stated that ''agency inaction leading to perceived deadline pressure

[42] The commenter cited to *Administrator* v. *Pirker,* NTSB Order No. EA–5739 at 12 (Nov. 17, 2014).

does not constitute good cause to dispense with public notice and comment.'' [43] The Mercatus Center asserted that a public notice-and-comment period is necessary and in the public interest because any requirement to register UASs potentially adversely affects numerous non-commercial operators. The Mercatus Center further asserted that the issuance of a final rule without notice and comment opens up the registration requirement to reversal if challenged in court.

A number of individual commenters similarly asserted that the FAA has not presented any data to substantiate the need to proceed with this rulemaking on an emergency or expedited basis. Like CEI, these commenters pointed to a lack of data showing either that there is an increased safety risk that needs to be addressed or that registration will, on its own, adequately address that risk. Some commenters specifically found fault with FAA's reliance on increased number of UAS ''incidents'' reported to the FAA by manned aircraft pilots. Several commenters noted that the AMA analyzed those reported ''incidents'' and found that out of the 764 reported records, only 27 (or 3.5%) were identified as a near mid-air collision, with nearly all of those involving government-authorized military drones.[44] The commenters noted that most of the ''incidents'' have merely been sightings of UAS. One individual pointed out that the FAA has published no analysis of its own ''sightings'' data; nor has it disputed the AMA's analysis of that data. This individual also asserted that a doubling in the rate of UAS ''sightings'' in 2015 is consistent with the rate of growth of consumer small UAS, and is not cause for overreaction.

Another individual claimed that FAA statistics show that birds are far more of a threat to air traffic than toy helicopters, and that not one single incident of a toy model causing an accident has been reported, while bird strikes number over 7,000 a year. Several other commenters noted that there has only been one recorded collision between a manned aircraft and a model aircraft. One such individual stated that it was a well-known incident in which a biplane struck a large model airplane that was hovering over a runway at an air show. This individual further stated that even though that model airplane was larger than the vast majority of models most hobbyists fly, the biplane received only a minor dent to its wing. Another individual questioned whether the FAA has examined empirical evidence from the millions of model flight operations to determine if lack of compliance with the labeling requirement had any correlation to the frequency or severity of mishaps. Another individual pointed to a recent NTSB interpretation (NTSB–AS–2015–0001) that clarifies that ''model aircraft'' do not fall within the definition of unmanned aircraft for accident notification/investigation purposes. Quoting that interpretation, this commenter stated that the NTSB ''has historically not investigated the rare occasions in which a model aircraft has cause serious injury or fatality,'' and clearly does not believe unregistered small UAS to be a significant threat to the NAS.

A number of commenters characterized the registration requirement as a ''knee jerk'' reaction to a perceived problem based solely on anecdotal evidence, which will punish the many for the acts of a few. Other commenters said that any UAS-related incidents can easily be remedied by stricter enforcement of existing laws.

In contrast to those commenters who claimed that the FAA does not have good cause to issue a rule without going through notice and comment rulemaking, Modovolate Aviation, LLC that the FAA does have good cause to issue a rule without notice and comment, and should therefore set up a simple database and registration interface immediately and issue an emergency rule requiring compliance. This commenter asserted that such authority comes from both the APA (5 U.S.C. 553(b)(3)(B)) and the FAA's own rules (14 CFR 11.29(a)), and that the FAA's statements that the growing number of pilot reports of UAS sightings reveals an imminent problem and serves as an appropriate basis for such an ''emergency rule.'' This commenter also asserted that the FAA will not achieve its goals by engaging in another protracted rulemaking process that takes two years.

In the preamble discussion of the agency's good cause for proceeding with an IFR, the agency explains its rationale for forgoing notice and comment prior to the effective date of this rulemaking and issuing this immediately effective IFR. The agency also notes that it is seeking comment on this rulemaking and may modify the rule based on comments received.

3. Comments Addressing Other Legal Issues With the Proposed Registration Requirement

The Mercatus Center at George Mason University stated that under Executive Order 12866, a rule on non-commercial UAS registration may be economically significant and therefore require a cost-benefit analysis. The Mercatus Center claimed that past experience with national registry systems suggests that there will be dramatic implementation and compliance costs that the DOT may be systematically underestimating. The Mercatus Center further claimed that these costs will be exacerbated by factors such as fast UAS depreciation and replacement rates, difficulty of enforcing retroactive compliance, and the sheer volume and speed at which UASs are being produced, among other factors.

Several other commenters also stated that the FAA needs to conduct cost-benefit analysis before proceeding with this rulemaking. For example, one individual stated that a cost benefit analysis ''based on a scientific collection of unbiased safety data'' should be conducted before any new registration program is put in place. This individual asserted that the FAA has not provided a convincing case that small UAS pose a safety risk to the NAS, or that that a registration program will be any more successful than an approach, such as the AMA's Safety Code, that requires owners to put their name and address on the aircraft. A few other individuals said the FAA needs to consider that a registration requirement may expose UAS owners to additional state-imposed taxes and fees. Another individual pointed to the potential economic impact a registration requirement may have on small businesses. This individual asserted that the requirement may impact small hobby shops, as well as major distributors like Horizon Hobby and Hobbico, because people will not want to register their aircraft with the FAA and will therefore choose to participate in other consumer hobbies that do not require registration with the government. The News Media Coalition stated that any registration process established by the FAA ''must avoid placing undue burden on the First Amendment right to gather and disseminate news.''

Several individual commenters stated that a registration requirement is an invasion of privacy. EPIC discussed its concerns about the privacy and civil liberty risks posed by the use of UAS in

[43] The commenter cited *Air Transport Association of America* v. *Department of Transportation,* 900 F.2d 369 (D.C. Cir. 1990 (''Insofar as the FAA's own failure to act materially contributed to its perceived deadline pressure, the agency cannot now invoke the need for expeditious action as 'good cause' to avoid the obligations of section 553(b)).

[44] A few commenters provided a link to the AMA report. *http://www.modelaircraft.org/gov/docs/AMAAnalysis-Closer-Look-at-FAA-Drone-Data_091415.pdf.*

the United States, and asserted that the enhanced surveillance capabilities of UAS raise significant Fourth Amendment implications.[45]

Consistent with comments regarding Executive Order 12866, the FAA has completed an economic analysis of this rulemaking. The economic analysis for this rulemaking can be found in the docket with the IFR.

Regarding comments pertaining to free speech and privacy, the agency clarifies that this IFR does not provide operating restrictions. Rather, this rulemaking is intended only to establish a streamlined approach for small unmanned aircraft registration.

N. Alternatives to Registration

The FAA received a number of comments recommending alternatives to a requirement of registration.

Clarification/Request for Information: Several commenters suggested a requirement for small UAS operators to become members of a community-based organization, instead of a registration requirement. One commenter recommended that an organization similar to the USPA (United States Parachute Association) be formed to manage UAS training, licensing, and registration. Another commenter said it would make more sense for the DOT and FAA to mandate that small UAS pilots join any community-based organization that follows a set of standardized rules. Several commenters recommended that the FAA specifically require model aircraft operators to become AMA members. One commenter suggested that AMA be put in charge of the registration of small UAS users, with the registration database maintained by the AMA independently, or with a subsidy from the DOT/FAA. Several other commenters, however, opposed the idea of requiring AMA membership or allowing the AMA to be any part of the official registration requirement. One individual stated that registration is an inherently governmental function that should not be ceded to any dues collecting organization. This commenter pointed out that neither the Experimental Aircraft Association nor the Aircraft Owners and Pilots Association register manned aircraft. Another individual said the AMA should not be part of the registration process because it is ''a privately run optional insurance consortium for hosting a common airfield,'' not an authority regarding model aircraft design, standards, and practices. The Drone User Group Network said that the AMA ''while a venerable association, does not have the interests of responsible and dedicated UAS operators at the core of its mission.'' Another individual listed a number of concerns about the AMA's safety programming (*e.g.,* failure to enforce their own requirement to have AMA number and/or address in their member's aircraft) and said that he is not comfortable with the AMA being permitted to manage the inherently governmental function of registration.

Several commenters who opposed a registration requirement said the FAA should review the FCC's experience with the explosive growth of mobile Citizen Band radios some years ago, which ultimately resulted in abandoning the licensing requirement for those radios. One commenter recommended that driver's licenses be used for registration, instead of creating a new registry system. Another commenter said recreational operators could be required to carry a current driver's license and a safety card, which would be issued after the operator watched an FAA video on proper flying procedures.

A number of commenters said the FAA needs to clarify what it will consider to be a UAS for purposes of the registration requirement. Some commenters asserted that relying on the FAA's definition of ''aircraft'' is problematic because that definition can be construed to mean any device which takes to air, including, for example, a Frisbee, a paper airplane, a foam airplane, or a balsa wood rubber-band powered airplane. As discussed above, many commenters urged the agency to exclude traditional model aircraft from the definition of UAS for purposes of the registration requirement. Some of those commenters questioned why model aircraft would be included in a registration requirement while other types of ''aircraft,'' such as ultralights, model rockets and kites, would not. Several commenters pointed out that ultralights can weigh up to 249 pounds, carry up to 5 gallons of flammable fuel, carry an unlicensed pilot, be unregistered, and still operate in the NAS (in many, but not all areas).

Several individual commenters questioned whether the agency can handle the registration of millions of recreational UAS. One commenter noted that the registration database could become overloaded and unmanageable if every person registers every model aircraft they purchase or receive—many of which will not last past a single flight—but then fail to notify the FAA when a model is lost, destroyed, or sold. Also pointing to the short life span of most small UAS, another commenter similarly said the registration system will become overwhelmed if recreational users are required to register and re-register each model aircraft they obtain. Another commenter said that requiring UAS owners to renew their registration will ''complicate everything'' and lead to people involuntarily breaking the law when they forget to re-register their UAS. Several commenters wondered how the registration process will be funded.

Several commenters addressed the effect of a registration requirement on innovation and growth. The National Association of Mutual Insurance Companies (NAMIC) encouraged the FAA and the Task Force to consider how the registration system will be integrated into or used in conjunction with the commercial development of UAS. Specifically, NAMIC said the FAA and Task Force should consider how industries that are critical to UAS development will depend on or require UAS registration. NAMIC asserted that ''streamlining requirements for UAS registration would certainly be in the interest of avoiding duplication, minimizing burdens, and best protecting innovation and encouraging growth in the UAS industry. Similarly, TIA said the FAA must implement UAS regulations that do not inhibit advancement but rather spur growth and inspire future innovators. The University of Illinois at Urbana-Champaign urged the FAA and DOT to consider alternatives to a registration (which is said is likely to prove both burdensome and ineffective) because ''onerous regulations applied to UAS research will stifle innovation and put the United States at a competitive disadvantage.'' An individual commenter similarly said that regulation ''will increase costs, drive people from the activity, and retard innovation.'' One individual commenter argued that model aircraft ''represent a huge employment, technological, and economic opportunity for our country (and world), and we cannot afford to squash this potential with more laws.'' A group of academics noted that traditional model aircraft have inspired generations of our scientists, engineers, and inventors. A number of other commenters also expressed concern that a registration requirement will

[45] EPIC made reference to its 2012 petition to the FAA to undertake a rulemaking to establish privacy regulations prior to the deployment of commercial drones in the national airspace, and its lawsuit against the FAA for denying that petition. EPIC also made reference to its testimony before Congress regarding the need to adopt comprehensive legislation to limit drone surveillance in the United States.

discourage young people from becoming involved in model aviation which, in turn, will discourage them from entering careers in STEM-related fields.

A commenter who had been issued an exemption under section 333 of Public Law 112–95 questioned whether he or she would have to re-register their UAS, and what the time-frame for that would be. Another commenter questioned how the registration requirement would apply to UAS that are flown infrequently or not at all. Another individual commenter questioned what the process would be for removing non-functional UAS from the registration system. Another commenter working overseas wondered whether he would have to register his UAS to be permitted to operate it during visits to the United States.

Delair-Tech recommended the following registration process for manufactured UAS: (1) Each UAS produced is assigned an aircraft type designator (assigned by ICAO) and a unique serial number (assigned by the manufacturer); (2) the user manual for each UAS instructs its owner to turn on the UAS and its ground control station/software within internet connectivity coverage; (3) the ground control software detects an unregistered UAS and opens a registration window, which prompts the owner to enter their contact information (including phone number); (4) the registration information is transmitted to the national registration system, which sends a verification code to the owner via text message; (5) the owner enters the code through the ground control software and then the registration system verifies the code and sends a registration number to the ground control station; (6) the ground control software programs the registration number into the UAS, which enables the owner to fly the UAS. As an alternative to using the ground control software to connect directly to the national registration system, Delair-Tech suggested the owner be given the URL of the registration system, through which the owner would input contact information and receive a verification code. The owner would also receive the registration number through the web application, which they would then input into the UAS through the ground control software.

An individual commenter suggested that as an alternative to issuing an expedited registration rule the agency issue a temporary, immediately effective rule mandating point-of-sale distribution of agency materials summarizing the operational restrictions for model aircraft. This commenter stated that acting promptly to require retailers to communicate the core regulatory message would more directly address the fear of improperly operated UAS becoming a safety risk as more are sold to hobbyists. The commenter also stated that such materials largely already exist and the requirement for distributing the information could be satisfied, particularly by online retailers, by a check-box acknowledgment or an emailed link to existing FAA educational Web sites. The commenter cited legal authority that would support an exercise of authority to compel commercial speech when it is in the service of a significant public interest.

RILA urged the establishment of a preemptive federal standard for UAS to allow for uniformity, consistency, and alleviate potential burdens on both retailers and consumers if states are left to legislate potentially inconsistent UAS safety.

Some commenters said an education program, geo-fencing, and strict enforcement of the safety rules would be more effective than requiring registration of these aircraft.

A few commenters advocated for a tiered licensing process, allowing operators who have qualified for higher tiers (*e.g.,* through additional training or testing) to operate UAS with advanced capabilities. Several commenters said that FAA should regulate UAS operators in the same way the FCC licenses amateur (ham) radio operators, and one commenter also said that retailers of certain UAS should require proof of FCC licensing before purchase.

The Mercatus Center at George Mason University stated that the DOT and FAA should define a threshold ''that liberalize most small UASs, requiring registrations for only the largest and highest-powered UASs, while continuing to focus on integrating all nongovernmental UASs within a framework based on the principles of permissionless innovation.'' This commenter went on to say that, instead of an ''impractical'' registration scheme, the FAA should adopt Transport Canada's model and require simple online notification for commercial operations within a middle weight class. Other commenters said that operators should have to abide by the AMA safety code.

The South Florida UAV Consortium recommended that UASs be restricted to a limited operation until the operator completes a training course and receives a code to unlock the software to allow it to fly its full range.

One commenter recommended two categories of licenses—one for commercial products that can be purchased off the shelf (with limitations on the degree to which they can be modified) and one for home-built or substantially modified aircraft. The commenter asserted that this second category of licenses ''would address the impossibility of implementing a per-device registration scheme in a world of imported electronics and homebrew experimentation.'' Within the two categories of licenses, the commenter recommended different classes based on the available power carried on the aircraft.

IFR Requirement: The FAA disagrees with commenters who stated that all small unmanned aircraft should be registered with the AMA and that AMA should be exclusively responsible for the registry. The FAA is specifically directed by statute to develop and maintain an aircraft registry. Accordingly, the FAA cannot abdicate its responsibility to AMA or any other organization outside the FAA.

Some commenters on this topic addressed the need for a clear definition of which aircraft require registration and which do not; the FAA has addressed that definition in an earlier section. In response to the comments about capacity issues and streamlining registration, the web-based registration system established by this rule will allow the Registry to better accommodate the aircraft registration required for owners of small unmanned aircraft.

O. Comments Beyond the Scope

The nature of the FAA's request for comment in the Clarification/Request for Information resulted in some commenters providing information that did not fall within the twelve comment areas. The FAA is summarizing those comments that were outside the scope of the twelve questions in this section.

A few commenters remarked on the make-up of the Task Force. One individual stated that the presence of Amazon, Walmart and Best Buy, among other major corporations, ''gives the impression, as face value, of being politically driven by major corporations to restrict tax paying citizens in this country from using their airspace and the enjoyment of flying their model aircraft in favor of a major corporation.'' This individual asserted that these corporations would prefer to eliminate model aviation in order to have open skies to operate their delivery service. Two other commenters similarly said that the UAS industry representatives on the Task Force ''have a penchant for regulations and may actually benefit from such regulation given that they have the resources to cover the cost required by such regulation and that

inevitably such regulation will limit free enterprise.'' These commenters questioned why the FAA did not invite grass-roots small UAS organizations, such as the Small UAV Coalition.

A commenter suggested reducing risk to aviation by permitting local authorities to utilize a transmitter to electronically disable UAS that are being flown illegally. The commenter also suggested developing a means to report illegal UAS operation. Another commenter said that law enforcement should be able to confiscate UAS that are flown illegally. The National Association of Mutual Insurance Companies, Minnesota Department of Transportation, and other commenters suggested requiring UAS operators to purchase liability insurance. Additionally, NetMoby and other commenters remarked that FAA should impose significant fines and other civil or criminal penalties on operators who fail to register or fly in a dangerous or illegal manner.

The Toy Industry Association urged FAA to implement an IFR instead of a final rule at this point. The commenter said that an interim rule would permit the agency and UAS Task Force to create a pilot registration system that would include only UAS that have ''high risk'' capabilities, and study this system before implementing a final rule. Other commenters, including the News Media Coalition, encouraged FAA to finalize the small UAS rule proposed for commercial users to provide an example of clear guidelines for all users.

Skyward, Inc. recommended that FAA develop a more comprehensive approach to UAS management, including technical standards for a UAS system for the NAS, and said that FAA should review NASA's UAS Traffic Management program and the Department of Homeland Security's STIX and TAXII standards as examples of technical standards development. Skyward said that, for example, a comprehensive UAS system could include ''detection capabilities that are able to detect and localize non-participating or malfunctioning aircraft as part of expanded airspace radar and surveillance systems.''

Many commenters expressed concern about the expedited timeframe in which the DOT and the FAA plan to implement the registration system. UAVUS said the plan to create a registration system this holiday season is ''overly ambitious, and could add to the confusion created by the absence of the FAA's final rulemaking for the commercial use of small UASs.'' RILA stated its appreciation for the agency's goal of increasing safe and responsible UAS use, but asserted that the logistical challenges in implementing such a system within the current expedited timeframe ''make doing so responsibly and coherently impossible.'' Given the expedited timeframe, RILA, NRF, and TIA encouraged the FAA to consider the use of an interim final rule instead of a direct final rule. NRF alternatively suggested a pilot program to evaluate the operational needs of a registration system.

The National Agricultural Aviation Association (NAAA), Colorado Agricultural Aviation Association, and Alaska Legislative Task Force on Unmanned Aircraft Systems recommended that UAS should be required to be more visible to manned aircraft to avoid collision by requiring UAS to be equipped with strobe lights and painted conspicuous colors.

Two commenters suggested that as an alternative to registering individual UAS, that owners be required to register their transmitters. One of those commenters asserted that the transmitter registration would provide an easy way to identify operators without having to physically locate them or their UAS because transmitters broadcast a radio signal that can be picked up by anyone in the vicinity. This commenter further asserted that relying on markings on the aircraft will do nothing to identify a problem unless the UAS crashes, but, as technology advances, transmitters can transmit a personal ID that can be read with receiver equipment. A few other individual commenters recommended a requirement to register the flight controller instead of the aircraft.

P. Miscellaneous

The FAA has updated § 91.203(a)(2) to allow the Certificate of Aircraft Registration issued under part 48 to satisfy the requirements of that paragraph.

The FAA has also made the following technical amendments to part 47: The Department of Homeland Security currently exercises the oversight responsibilities of the former Immigration and Naturalization Service. Part 47 has been updated to reflect this change.

The agency has also clarified that the reference to ''armed forces'' includes only those armed forces of the United States.

VIII. Section-by-Section Discussion of the Interim Final Rule

In part 1, definitions and abbreviations, definitions for ''model aircraft,'' ''small unmanned aircraft,'' ''small unmanned aircraft system,'' and ''unmanned aircraft'' are added.

In part 45, identification and registration marking, § 45.1 is revised to add a specific cross-reference to 14 CFR part 47 to indicate that the marking requirements of part 45 only relate to aircraft registered under part 47.

In part 47, aircraft registration, in § 47.2 the definition of ''resident alien'' is revised to remove the reference to the Immigration and Naturalization Service and replace it with a reference to the Department of Homeland Security. The term ''U.S. citizen'' is revised to read ''Citizen of the United States or U.S. citizen'' to conform to other uses of this term.

Section 47.3 is revised to make clear that, when stating that no person may operate an aircraft that is eligible for registration under 49 U.S.C. 44101–44104, Armed Forces refers to Armed Forces of the United States.

Section 47.7 is revised to remove the reference to the Immigration and Naturalization Service and replace it with a reference to the Department of Homeland Security.

The FAA is adding new 14 CFR part 48, registration and markings for small unmanned aircraft.

Section 48.1 provides the applicability for the part. It states that small unmanned aircraft eligible for registration in the United States must be registered and identified in accordance with either the registration and identification requirements in part 48, or the registration requirements in part 47 and the identification and registration marking requirements in subparts A and C of part 45. Section 48.1 also explains that small unmanned aircraft intended to be operated outside of the territorial airspace of the United States, or registered through a trust or voting trust, must be registered in accordance with part 47 and satisfy the identification and registration marking requirements of subparts A and C of part 45.

Section 48.5 provides the compliance dates for small unmanned aircraft used exclusively as model aircraft, and the compliance dates for small unmanned aircraft used as other than model aircraft.

Section 48.10 provides definitions of ''Citizen of the United States or U.S. citizen,'' ''Registry,'' and ''resident alien.'' These are the same definitions found in part 47.

Section 48.15 provides that no person may operate a small unmanned aircraft that is eligible for registration under 49 U.S.C. 44101–44103 unless the owner has registered and marked the aircraft in accordance with the requirements of

part 48; the aircraft weighs 0.55 pounds or less on takeoff, including everything that is on board or otherwise attached to the aircraft; or the aircraft is an aircraft of the Armed Forces of the United States.

Section 48.20 provides the criteria for eligibility of the small unmanned aircraft for registration.

Section 48.25 describes the requirements for applicants wishing to register a small unmanned aircraft using part 48. Applicants must provide the required information, and must meet other ownership requirements listed in the section.

Section 48.30 provides the fees for small unmanned aircraft registration.

Section 48.100 describes information applicants must submit when registering a small unmanned aircraft intended to be used as other than a model aircraft, and the information applicants must submit when registering a small unmanned aircraft intended to be used exclusively as a model aircraft.

Section 48.105 requires small unmanned aircraft owners to maintain current information in the registration system.

Section 48.110 provides the Certificate of Aircraft Registration information for small unmanned aircraft intended to be used other than as model aircraft. It provides the effective date of the Certificate, information regarding registration renewal, and describes events affecting the effectiveness of the Certificate of Aircraft Registration.

Section 48.115 provides the Certificate of Aircraft Registration information for small unmanned aircraft intended to be used exclusively as model aircraft. It provides the effective date of the Certificate, information regarding registration renewal, and describes events affecting the effectiveness of the Certificate of Aircraft Registration.

Section 48.120 discusses circumstances in which a small unmanned aircraft registration is invalid. Circumstances include when the aircraft is registered in a foreign country; the applicant is not the owner, except when the applicant registers on behalf of an owner who is under 13 years of age; the applicant is not eligible to submit an application under part 48; or the interest of the applicant in the aircraft was created by a transaction that was not entered into in good faith, but rather was made to avoid (with or without the owner's knowledge) compliance with 49 U.S.C. 44101–44103.

Section 48.125 explains that for those persons who do not meet the citizenship requirements for U.S. registration, the certificate issued under part 48 constitutes a recognition of ownership.

Section 48.200 contains general provisions for small unmanned aircraft marking.

Section 48.205 provides the requirements for the display and location of the unique identifier.

In part 91, general operating and flight rules, § 91.203 is revised to reference Certificates of Aircraft Registration provided in part 48.

In part 375, navigation of foreign civil aircraft within the United States, § 375.11 is clarified to note that this includes a small unmanned aircraft.

Section 375.38 authorizes owners of foreign civil aircraft that are small unmanned aircraft used exclusively as model aircraft to operate within the U.S. and requires owners of aircraft engaged in such operations to complete the part 48 registration process prior to operation.

IX. Regulatory Notices and Analyses

A. Regulatory Evaluation

Changes to Federal regulations must undergo several economic analyses. First, Executive Order 12866 and Executive Order 13563 direct that each Federal agency shall propose or adopt a regulation only upon a reasoned determination that the benefits of the intended regulation justify its costs. Second, the Regulatory Flexibility Act of 1980 (Pub. L. 96–354) requires agencies to analyze the economic impact of regulatory changes on small entities. Third, the Trade Agreements Act (Pub. L. 96–39 as amended) prohibits agencies from setting standards that create unnecessary obstacles to the foreign commerce of the United States. In developing U.S. standards, the Trade Agreements Act requires agencies to consider international standards and, where appropriate, that they be the basis of U.S. standards. Fourth, the Unfunded Mandates Reform Act of 1995 (Pub. L. 104–4) requires agencies to prepare a written assessment of the costs, benefits, and other effects of proposed or final rules that include a Federal mandate likely to result in the expenditure by State, local, or tribal governments, in the aggregate, or by the private sector, of $100 million or more annually (adjusted for inflation with base year of 1995). This portion of the preamble summarizes the FAA's analysis of the economic impacts of this IFR. We suggest readers seeking greater detail read the full regulatory evaluation, a copy of which we have placed in the docket for this rulemaking.

In conducting these analyses, FAA has determined this IFR has benefits that justify its costs, and is a ''significant regulatory action'' as defined in section 3(f) of Executive Order 12866 because it raises novel policy issues contemplated under that executive order. The rule is also ''significant'' as defined in DOT's Regulatory Policies and Procedures. The IFR will have a positive economic impact on a substantial number of small entities, will not create unnecessary obstacles to international trade, and will not impose an unfunded mandate on state, local, or tribal governments, or on the private sector. These analyses are summarized below.

Total Benefits and Costs

There are problems arising from the rapid proliferation of small unmanned aircraft and these problems are occurring more frequently. Sales projections show the number of small unmanned aircraft continuing to increase dramatically, and thus addressing the problem is urgent. Registration provides an immediate and direct opportunity to educate new users of unmanned aircraft who may have no knowledge of the system in which they are operating, and thus, no knowledge of how to operate safely within it. Registration and marking of small unmanned aircraft will provide owners education regarding operating in the NAS and will promote accountability in those operations, at a minimal cost to operators and the government.

Currently aircraft registration is a paper-based process defined in part 47. Under current statutory and regulatory policy, the FAA could require UAS model aircraft owners,[46] at a significant cost, to register their small unmanned aircraft under part 47 using the legacy paper-based system. Commercial owners [47] that have been granted exemptions or certificates of authorization to operate small unmanned aircraft in the NAS have been required to register their aircraft under part 47. Also, the sUAS Operation and Certification NPRM would require non-model aircraft owners (*e.g.,* commercial and public owners of sUAS) to register their aircraft under part 47 as outlined in the NPRM. The agency expects to finalize that rulemaking in 2016.

[46] for purposes of the economic analysis of this IFR, the term ''modeler'' means the owner of a small unmanned aircraft that satisfies the definition of ''model aircraft'' added to 14 CFR 1.1

[47] For purposes of the economic analysis of this IFR, the term ''commercial owners'' or ''non-modeler'' means the owner of a small unmanned aircraft used for non-model purposes.

The FAA has used agency discretion in the past by not requiring owners of small unmanned aircraft intended to be used as model aircraft in accordance with section 336 of Public Law 112–95 to register their aircraft although as noted commercial operators of small unmanned aircraft have been required to register their aircraft. Due to the rapid increase in sUAS for hobby use (and soon at much greater volumes for commercial purposes), the FAA is creating an alternative simple, web-based registration process to significantly reduce the time to register small unmanned aircraft. In addition, to ease the burden to modelers this regulation will allow those owners to register once and use the same identification number for all their aircraft, instead of registering each of their small unmanned aircraft separately.

In order to implement the new streamlined, web-based system described in this IFR, the FAA will incur costs to develop, implement, and maintain the system. Small UAS operators will require time to register and mark their aircraft, and that time has a cost. The total of government and registrant resource cost for small unmanned aircraft registration and marking under this new system is $56 million ($46 million present value at 7 percent) through 2020.

In evaluating the impact of this rule, we compare the costs and benefits of the IFR to a baseline consistent with existing practices: for modelers, the exercise of discretion by FAA (not requiring registration), and for non-modelers, registration via part 47 in the paper-based system. We also calculate the costs of the rejected alternative: requiring modelers and non-modelers alike to register aircraft via the paper-based system.

In order to compare the costs of this rule to this baseline, the FAA estimated the costs of registering sUAS aircraft under the web-based registration system resulting from this part 48 rulemaking (the IFR). The two populations, modelers and non-modelers, have slightly different processes as noted in this evaluation. In all of these scenarios, sUAS weighing 0.55 pounds or less are excluded from registration. In these analyses, we estimate the private-sector compliance costs and government costs for each scenario.

TABLE 5—SUMMARY OF QUANTIFIED COSTS AND BENEFITS ($M)

Year	Calendar year	Total cost		Difference	7% P.V.
		Baseline	IFR		
0	2015	$ 0.0	$ 5.5	−$ 5.5	−$ 5.47
1	2016	21.3	6.3	15.0	14.00
2	2017	86.5	8.3	78.1	68.25
3	2018	89.0	12.1	76.9	62.77
4	2019	91.6	11.6	80.0	61.03
5	2020	94.2	11.8	82.5	58.79
Total		382.5	55.6	327.0	259.4

Note: numbers may not add due to rounding.

Who is potentially affected by this rule?

All owners of small unmanned aircraft which weigh more than 0.55 pounds and less than 55 pounds on takeoff.

Assumptions and Data

The benefit and cost analysis for the regulatory evaluation is based on the following factors/assumptions. Technology, markets, and uses for small unmanned aircraft are evolving rapidly and there is a high degree of uncertainty how the future will unfold and so the FAA requests comments (supported with data) on these assumptions.

- The period of the regulatory impact analysis begins in 2015 (denoted Year 0) and ends in 2020 (denoted Year 5).
- This analysis considers the benefits and costs of requiring the registrations of sUAS weighing less than 55 pounds and more than 0.55 pounds on takeoff.

We use a seven percent discount rate for the benefits as prescribed by OMB in Circular A–4.

Population and Forecast

- Most of these assumptions, unless otherwise noted, were based on interviews with manufacturers, retailers, and other industry experts.
- Estimates of small unmanned aircraft registrations are based on projections of sUAS sales for the period of analysis. A sales forecast was developed based on use cases and likely adoption rates by commercial application and consumer electronic s-curve analysis for non-commercial applications. This forecast was then adjusted to obtain the number of modelers and the number of non-modeler sUAS units.
- Two basic populations are estimated: (1) Model aircraft owners and their sUAS units and (2) the number of commercial/public owners and their sUAS units. In this document, the term ''modeler'' means the owner of a small unmanned aircraft that satisfies the statutory definition of ''model aircraft'' now codified in 14 CFR 1.1. The term ''commercial owner'' or ''non-modeler'' means the owner of a small unmanned aircraft used for non-model aircraft purposes.
- For non-modelers, we assume that on average, all sUAS fail within a year and are replaced in the next year. For modelers we use the assumption that an average of ten percent of the modelers' sUAS survive into a second year, because they are used less intensively. These assumptions are based on manufacturers' information.
- Unmanned aircraft weighing 0.55 pounds or less are excluded from the registrations forecast. We assume 20 percent of the sales forecast will be unmanned aircraft weighing 0.55 pounds or less. This analysis is based on an examination of the current unit size distribution. While there may be some incentive for manufacturers to increase the number of aircraft produced below the registration size cut-off, the FAA believes the inherent limitations of the weight and available technology will not drive large shifts during analysis period. SUAS flown exclusively indoors need not be registered. FAA assumes most sUAS over 0.55 pounds will be flown outdoors and must be registered.
- The entire existing fleet of model aircraft and 2015 fourth quarter sales are assumed to be registered in Period 0 or 2015.
- Most non-modelers will register their aircraft after the FAA has finalized the sUAS Operation and Certification

NPRM, anticipated to go into effect in June 2016.

- On average, model aircraft owners are assumed to own an average fleet size of 1.5 sUAS.
- 80 percent of model aircraft owners replace each aircraft as it is destroyed. (In other words, 20 percent of modelers drop out of the hobby each year).
- On average, non-model sUAS owners are assumed to own 2 aircraft at a time. Every year all of the non-model sUAS owners go through the registration system replacing their two aircraft.

Time

- The estimated time to register an aircraft via the part 47 (paper-based system) system is 30 minutes.[48]
- The estimated time for a model aircraft owner to establish an online account and register an aircraft, under this rulemaking, is estimated to take 5 minutes; a registration renewal for these owners is also estimated to take 5 minutes. The bulk of this time includes reading and acknowledging basic safety information presented during the registration process.
- The estimated time for a non-modeler registrant to establish an online account and register two small unmanned aircraft is 7 minutes; 5 minutes to establish an account plus 1 minute per small unmanned aircraft.
- The estimated time for a non-modeler registrant to de-register each aircraft is three minutes.
- The time for an owner to mark an aircraft with its registration number is de minimis.
- The analysis assumes that all sUAS owners will comply with the registration processes considered in the regulatory analysis (part 47 baseline system and the web-based systems resulting from this part 48 rulemaking).

Costs

- The FAA assigns an hourly value of $19.13 per hour for the value of time for model aircraft registrants and $24.89 per hour for the value of time for non-modeler registrants in 2015. These hourly values are in 2013 dollars adjusted to reflect the growth of real changes in median household income over the analysis interval. [49]
- FAA estimates that its costs are $22 for the registration of an aircraft in the current paper-based system. This estimate is based on an internal cost model developed by FAA's Civil Aviation Registry for managerial purposes.
- FAA cost information for the streamlined, web-based registrations was developed based on cost models and FAA data. Costs for the web-based system include startup costs, costs to provide interfaces for retailers and manufacturers, the cost of providing for public search function based on the unique identifier, the cost of providing for law enforcement access, and maintenance costs, whether incurred by FAA personnel or FAA's contractors. We do not include costs for manufacturers or retailers to provide information to the registration system or to change packaging as those are voluntary actions. FAA expects that retailers will make point-of-sale interfaces available in the future.
- As is standard practice, FAA does not include costs of enforcement of this rule.

Safety

- We assume this regulation does not affect the levels of FAA manpower or resources expended on UAS safety education and outreach but it will allow the FAA to target those efforts, making those on-going efforts more effective.
- We do not attempt to quantify any safety benefit from this regulation. (See ''Qualitative Benefits'' section in the Regulatory Evaluation for further discussion).

Fees

- The fee to register an aircraft under part 48, as well as in the current paper-based system in part 47, is $5. This fee is required by statute and is based on an estimate of the costs of the system and services associated with aircraft registration. If actual costs for the web-based system are known before a final rule is issued, we will adjust the fee accordingly in the final rule. If not, we will continue to monitor and determine the actual costs and adjust the fee in a subsequent rulemaking. FAA notes that under part 47, the registration fee using the paper-based system is $5 per aircraft. FAA has begun a rulemaking to update this fee based on current costs. (Aircraft Registration and Airmen Certification Fees, RIN 2120–AK37).
- We have estimated the registration fee for the new web-based system to be $5, based on the projected costs to build and maintain the system and provide the registration service. Model aircraft owners will pay $5 to register and will be assigned a unique identifier that can be marked on the owner's entire fleet of model aircraft. Model aircraft owners will be required to renew their registration every 3 years and pay a $5 fee. There would be no charge for de-registration. Fees will be adjusted based on actual costs.
- Non-modeler aircraft owners will also pay a $5 fee to establish an online account and register an initial aircraft in the new web-based system. They will also pay a $5 fee to add each additional sUAS to their existing account. Aircraft must be re-registered after three years, but as noted above, FAA expects very few, if any, sUAS to last that long. Non-modeler aircraft owners will not pay a fee to de-register a sUAS.
- Government fees and taxes are considered transfers and, by Office of Management and Budget guidance, transfers are not considered a societal cost. These transfers are estimated separately from the costs and benefits of this IFR. The FAA acknowledges fees and transfers can create incentives for behavior change.

Costs of This Rule

TABLE 6—COST SUMMARY

[$M]

Year	Calendar year	Total cost			Total costs 7% P.V.		
		Baseline	Interim final rule	Rejected alternative	Baseline	Interim final rule	Rejected alternative
0	2015	$ 0.0	$ 5.5	$ 44.2	$ 0.0	$ 5.5	$ 44.2
1	2016	21.3	6.3	65.1	19.9	5.9	60.9

[48] See Supporting Statement, OMB 2120–0042 Aircraft Registration Including Assignment and Cancellation of U.S. Identification Marks

[49] The hourly opportunity cost for modelers is based on the mid-point estimate of the range values as specified in Section 1.2.3 of FAA's Treatment of Time: Economic Values for Evaluation of FAA Investment and Regulatory Decisions (*http://www.faa.gov/regulations_policies/policy_guidance/benefit_cost/*). The hourly opportunity cost for non-modelers is estimated as the median gross compensation which is the sum of median hourly wage and an estimate of hourly benefits. This estimate is reported in DOT guidance titled Revised Departmental Guidance on Valuation of Travel Time in Economic Analysis (Washington DC, 2015).

TABLE 6—COST SUMMARY—Continued

[$M]

Year	Calendar year	Total cost			Total costs 7% P.V.		
		Baseline	Interim final rule	Rejected alternative	Baseline	Interim final rule	Rejected alternative
2	2017	86.5	8.3	140.6	75.5	7.3	122.8
3	2018	89.0	12.1	155.7	72.6	9.9	127.1
4	2019	91.6	11.6	173.9	69.9	8.8	132.7
5	2020	94.2	11.8	195.9	67.2	8.4	139.6
Total	.....	382.5	55.6	775.4	305.1	45.7	627.3

Totals may not add due to rounding.

Benefits of This Rule

In this section, we discuss beneficial impacts to the non-modeler from the cost savings of this rule over registering sUAS aircraft using the baseline system. The cost savings offsets, by an order of magnitude, the new costs associated with modelers and non-modelers registering aircraft in the streamlined Web-based system.

The baseline column in Table 7 shows the total costs for non-modelers to register their aircraft using the paper-based system, while modelers do not register their aircraft. The IFR column shows the total costs to FAA and registrants (modelers and non-modelers) of the new web-based system. Table 7 shows the significant cost savings of subtracting the costs of registration between the baseline system from the registration costs imposed by this rulemaking.

TABLE 7—COST SAVINGS OF THE BASELINE VERSUS THE PART 48 RULEMAKING

[$M]

Year	Calendar year	Total Cost		Difference	7% P.V.
		Baseline	IFR		
0	2015	$ 0.0	$ 5.5	−$ 5.5	−$ 5.5
1	2016	21.3	6.3	15.0	14.0
2	2017	86.5	8.3	78.1	68.3
3	2018	89.0	12.1	77.9	62.8
4	2019	91.6	11.6	80.0	61.0
5	2020	94.2	11.8	82.5	58.8
Total	.....	382.5	55.6	327.0	259.4

Note: numbers may not add due to rounding.

This IFR also brings qualitative benefits. Registrants will be required to read and acknowledge some basic safety information during the registration process. The email and mailing addresses provided during the registration process provides further opportunity for future targeted safety education and information.

This rulemaking will improve the education of recreational sUAS owners and operators by making them aware of the regulatory and safety requirements affecting their activities. At the same time, it will provide essential educational tools to the legions of new and current flyers that are taking to the skies, so that they can use their unmanned aircraft safely.

The requirement to mark the aircraft with the registration number links the owner to the aircraft; providing accountability should an accident, incident, or regulatory violation occur. This IFR also has the potential to benefit sUAS owners. In the event of a mistake where the aircraft flies away from the owner, the registration marking provides a means for the aircraft to be returned to its owner.

Requiring aircraft registration and display of marking information often has a direct and immediate impact on safety-related issues. For example, aircraft registration and marking provides the FAA and law enforcement agencies an invaluable tool during inspections and investigations of inappropriate or prohibited behavior, as well as during emergency situations. One of the FAA's goals is to provide the FAA and local law enforcement agencies the immediate ability to quickly connect individuals to their aircraft with the fewest number of steps possible.

B. Regulatory Flexibility Determination

The Regulatory Flexibility Act of 1980 (Public Law 96–354) (RFA) establishes ''as a principle of regulatory issuance that agencies shall endeavor, consistent with the objectives of the rule and of applicable statutes, to fit regulatory and informational requirements to the scale of the businesses, organizations, and governmental jurisdictions subject to regulation. To achieve this principle, agencies are required to solicit and consider flexible regulatory proposals and to explain the rationale for their actions to assure that such proposals are given serious consideration.'' The RFA covers a wide-range of small entities, including small businesses, not-for-profit organizations, and small governmental jurisdictions.

The Regulatory Flexibility Act analysis requirements are limited to rulemakings for which the agency ''is required by section 553 . . . or any other law, to publish a general notice of proposed rulemaking for any proposed rule.'' 5 U.S.C. 603(a).In this instance, the agency has determined under section 553(b)(3)(B) of the APA that there is good cause for forgoing notice and comment for this rulemaking. Thus,

compliance with the RFA is not required in this instance.

Nonetheless, the FAA believes that this IFR will have a positive economic impact on a substantial number of entities for the following reasons. Individuals using small unmanned aircraft exclusively as model aircraft are not small business entities. For owners of aircraft used for commercial or non-model purposes, the $5 registration fee per small unmanned aircraft under this IFR is the same as what was proposed under the sUAS Operation and Certification NPRM. However this IFR reduces the burden for these small entities to register their small unmanned aircraft as compared to the current paper-based FAA registration system. Thus, due to the relieving nature of this IFR, there will be a positive economic impact on a substantial number of small entities.

C. International Trade Impact Assessment

The Trade Agreements Act of 1979 (Public Law 96–39), as amended by the Uruguay Round Agreements Act (Public Law 103–465), prohibits Federal agencies from establishing standards or engaging in related activities that create unnecessary obstacles to the foreign commerce of the United States. Pursuant to these Acts, the establishment of standards is not considered an unnecessary obstacle to the foreign commerce of the United States, so long as the standard has a legitimate domestic objective, such as the protection of safety, and does not operate in a manner that excludes imports that meet this objective. The statute also requires consideration of international standards and, where appropriate, that they be the basis for U.S. standards. The FAA has assessed the potential effect of this IFR and determined that it has a legitimate domestic objective—the protection of safety—and does not operate in a manner that excludes imports that meet this objective. Further, it is not an unnecessary obstacle because currently, there is no foreign registry that the FAA can recognize and the other requirements (compliance with provisions of part 48) impose no greater burden than that which is imposed on U.S. citizens.

D. Unfunded Mandates Assessment

Title II of the Unfunded Mandates Reform Act of 1995 (Public Law 104–4) requires each Federal agency to prepare a written statement assessing the effects of any Federal mandate in a proposed or final agency rule that may result in an expenditure of $100 million or more (in 1995 dollars) in any one year by State, local, and tribal governments, in the aggregate, or by the private sector; such a mandate is deemed to be a ''significant regulatory action.'' The FAA currently uses an inflation-adjusted value of $155.0 million in lieu of $100 million. This IFR does not contain such a mandate; therefore, the requirements of Title II of the Act do not apply.

E. Paperwork Reduction Act

The Paperwork Reduction Act of 1995 (44 U.S.C. 3507(d)) requires that the FAA consider the impact of paperwork and other information collection burdens imposed on the public. According to the 1995 amendments to the Paperwork Reduction Act (5 CFR 1320.8(b)(2)(vi)), an agency may not collect or sponsor the collection of information, nor may it impose an information collection requirement unless it displays a currently valid Office of Management and Budget (OMB) control number.

This action contains the following new information collection. As required by the Paperwork Reduction Act of 1995 (44 U.S.C. 3507(d)), the FAA has submitted this information collection to OMB for its review.

Summary: Persons owning small unmanned aircraft, whether intended to be used as model aircraft or as other than model aircraft, are required to register those aircraft with the FAA pursuant to 49 U.S.C. 44101–44103. Persons may register small unmanned aircraft pursuant to the requirements of 14 CFR part 48 as an alternative to the registration requirements of 14 CFR part 47. Aircraft registration is necessary to ensure personal accountability among all users of the national airspace system. Aircraft registration also allows the FAA and law enforcement agencies to address non-compliance by providing the means by which to identify an aircraft's owner and operator.

Use: Information will be used to identify small unmanned aircraft owners and to provide educational information regarding use of small unmanned aircraft in the national airspace system.

Respondents (including number of): See Table 8.

Frequency: As needed. Persons will register small unmanned aircraft prior to operation and, if they continue to own the aircraft, will renew registration every three years thereafter.

Annual Burden Estimate: For the modelers and non-modelers, the following table shows the total number of modelers, their time, and their costs to fill out the on-line system and register plus the time to re-register and for the non-modelers, the number of total respondents (small unmanned aircraft), their time to fill out the online system and register, the time to register each of their small unmanned aircraft, and their time de-register their aircraft after they retire their aircraft. There are no costs associated with this information collection aside from the time spent to complete registration.

TABLE 8—AVERAGE ANNUAL BURDEN ESTIMATES

[Years 0–5 (6 Years)]

Category	Number of responses (M)	Minutes per response	Frequency	Hours (000)
Modeler				
Owner Registration	0.57	5	1 time	47.8
Owner Re-Registration	0.16	5	Every 3 years	12.9
Non-Modeler				
Small Unmanned Aircraft Registration	1.82	3.5	1 Time	121.9
Small Unmanned Aircraft De-Registration	1.66	3	1 Time	69.0

Rows may not sum due to rounding.

The agency is soliciting comments to—

(1) Evaluate whether the proposed information requirement is necessary for the proper performance of the functions of the agency, including whether the information will have practical utility;

(2) Evaluate the accuracy of the agency's estimate of the burden;

(3) Enhance the quality, utility, and clarity of the information to be collected; and

(4) Minimize the burden of collecting information on those who are to respond, including by using appropriate automated, electronic, mechanical, or other technological collection techniques or other forms of information technology.

Individuals and organizations may send comments on the information collection requirement to the address listed in the **ADDRESSES** section at the beginning of this preamble by January 15, 2016. Comments also should be submitted to the Office of Management and Budget, Office of Information and Regulatory Affairs, Attention: Desk Officer for FAA, New Executive Office Building, Room 10202, 725 17th Street NW., Washington, DC 20503.

F. International Compatibility and Cooperation

In keeping with U.S. obligations under the Convention on International Civil Aviation, it is FAA policy to conform to International Civil Aviation Organization (ICAO) Standards and Recommended Practices to the maximum extent practicable. In the instance of this rulemaking, the FAA does not intend to comply with international standards. The registration and marking requirements in this IFR apply only to operations within the United States. The agency will file differences as is appropriate.

G. Environmental Analysis

FAA Order 1050.1F identifies FAA actions that are categorically excluded from preparation of an environmental assessment or environmental impact statement under the National Environmental Policy Act in the absence of extraordinary circumstances. The FAA has determined this rulemaking action qualifies for the categorical exclusion identified in paragraph 5–6.6f and involves no extraordinary circumstances.

X. Executive Order Determinations

A. Executive Order 13132, Federalism

The FAA has analyzed this immediately adopted final rule under the principles and criteria of Executive Order 13132, Federalism. The agency determined that this action will not have a substantial direct effect on the States, or the relationship between the Federal Government and the States, or on the distribution of power and responsibilities among the various levels of government, and, therefore, does not have Federalism implications.

B. Executive Order 13211, Regulations That Significantly Affect Energy Supply, Distribution, or Use

The FAA analyzed this immediately adopted final rule under Executive Order 13211, Actions Concerning Regulations that Significantly Affect Energy Supply, Distribution, or Use (May 18, 2001). The agency has determined that it is not a ''significant energy action'' under the executive order and it is not likely to have a significant adverse effect on the supply, distribution, or use of energy.

C. Executive Order 13609, Promoting International Regulatory Cooperation

Executive Order 13609, Promoting International Regulatory Cooperation, (77 FR 26413, May 4, 2012) promotes international regulatory cooperation to meet shared challenges involving health, safety, labor, security, environmental, and other issues and reduce, eliminate, or prevent unnecessary differences in regulatory requirements. The FAA has analyzed this action under the policy and agency responsibilities of Executive Order 13609, Promoting International Regulatory Cooperation. The FAA has analyzed this action under the policies and agency responsibilities of Executive Order 13609, and has determined that this action would have no effect on international regulatory cooperation.

XI. How To Obtain Additional Information

A. Rulemaking Documents

An electronic copy of a rulemaking document may be obtained via the Internet by—

Searching the Federal eRulemaking Portal (*http://www.regulations.gov*);

Visiting the FAA's Regulations and Policies Web page at *http://www.faa.gov/regulations_policies/* or

Access the Government Publishing Office's Web page at: *http://www.gpo.gov/fdsys/*.

Copies may also be obtained by sending a request (identified by notice, amendment, or docket number of this rulemaking) to the Federal Aviation Administration, Office of Rulemaking, ARM–1, 800 Independence Avenue SW., Washington, DC 20591, or by calling (202) 267–9677.

B. Comments Submitted to the Docket

Comments received may be viewed by going to *http://www.regulations.gov* and following the online instructions to search the docket number for this action. Anyone is able to search the electronic form of all comments received into any of the FAA's dockets by the name of the individual submitting the comment (or signing the comment, if submitted on behalf of an association, business, labor union, etc.).

C. Small Business Regulatory Enforcement Fairness Act

The Small Business Regulatory Enforcement Fairness Act (SBREFA) of 1996 requires FAA to comply with small entity requests for information or advice about compliance with statutes and regulations within its jurisdiction. A small entity with questions regarding this document, may contact its local FAA official, or the person listed under the **FOR FURTHER INFORMATION CONTACT** heading at the beginning of the preamble. To find out more about SBREFA on the Internet, visit *http://www.faa.gov/regulations_policies/rulemaking/sbre_act/*.

List of Subjects

14 CFR Part 1

Air transportation.

14 CFR Part 45

Aircraft, Signs and symbols.

14 CFR Part 47

Aircraft, Reporting and recordkeeping requirements.

14 CFR Part 48

Aircraft, Reporting and recordkeeping requirements, Signs and symbols, Small unmanned aircraft, Unmanned aircraft.

14 CFR Part 91

Air traffic control, Aircraft, Airmen, Airports, Aviation safety, Reporting and recordkeeping requirements.

14 CFR Part 375

Administrative practice and procedure, Aircraft, Foreign relations, Reporting and recordkeeping requirements.

The Amendment

In consideration of the foregoing, the Federal Aviation Administration amends Chapter I of Title 14, Code of Federal Regulations, as follows:

PART 1—DEFINITIONS AND ABBREVIATIONS

■ 1. The authority citation for part 1 is revised to read as follows:

Authority: 49 U.S.C. 106(f), 106(g), 40113, 44701.

■ 2. In § 1.1, add the definitions of ''Model aircraft'', ''Small unmanned aircraft'', ''Small unmanned aircraft

system'', and ''Unmanned aircraft'' in alphabetical order to read as follows:

§ 1.1 General definitions.

* * * * *

Model aircraft means an unmanned aircraft that is:

(1) Capable of sustained flight in the atmosphere;

(2) Flown within visual line of sight of the person operating the aircraft; and

(3) Flown for hobby or recreational purposes.

* * * * *

Small unmanned aircraft means an unmanned aircraft weighing less than 55 pounds on takeoff, including everything that is on board or otherwise attached to the aircraft.

Small unmanned aircraft system (small UAS) means a small unmanned aircraft and its associated elements (including communication links and the components that control the small unmanned aircraft) that are required for the safe and efficient operation of the small unmanned aircraft in the national airspace system.

* * * * *

Unmanned aircraft means an aircraft operated without the possibility of direct human intervention from within or on the aircraft.

* * * * *

PART 45—IDENTIFICATION AND REGISTRATION MARKING

■ 3. The authority citation for part 45 is revised to read as follows:

Authority: 49 U.S.C. 106(f), 106(g), 40103, 40113–40114, 44101–44105, 44107–44111, 44504, 44701, 44708–44709, 44711–44713, 44725, 45302–45303, 46104, 46304, 46306, 47122.

■ 4. In § 45.1, revise paragraph (b) to read as follows:

§ 45.1 Applicability.

* * * * *

(b) Nationality and registration marking of aircraft registered in the United States in accordance with part 47.

PART 47—AIRCRAFT REGISTRATION

■ 5. The authority citation for part 47 is revised to read as follows:

Authority: 4 U.S.T. 1830; Public Law 108–297, 118 Stat. 1095 (49 U.S.C. 40101 note, 49 U.S.C. 44101 note); 49 U.S.C. 106(f), 106(g), 40113–40114, 44101–44108, 44110–44113, 44703–44704, 44713, 45302, 45305, 46104, 46301.

■ 6. Revise § 47.2 to read as follows:

§ 47.2 Definitions.

The following are definitions of terms used in this part:

Citizen of the United States or U.S. citizen means one of the following:

(1) An individual who is a citizen of the United States or one of its possessions.

(2) A partnership each of whose partners is an individual who is a citizen of the United States.

(3) A corporation or association organized under the laws of the United States or a State, the District of Columbia, or a territory or possession of the United States, of which the president and at least two-thirds of the board of directors and other managing officers are citizens of the United States, which is under the actual control of citizens of the United States, and in which at least 75 percent of the voting interest is owned or controlled by persons that are citizens of the United States.

Registry means the FAA, Civil Aviation Registry, Aircraft Registration Branch.

Resident alien means an individual citizen of a foreign country lawfully admitted for permanent residence in the United States as an immigrant in conformity with the regulations of the Department of Homeland Security (8 CFR Chapter 1).

■ 7. In § 47.3, revise paragraph (b)(3) to read as follows:

§ 47.3 Registration required.

* * * * *

(b) * * *

(3) Is an aircraft of the Armed Forces of the United States.

* * * * *

■ 8. In § 47.7, Revise paragraph (b) to read as follows:

§ 47.7 United States citizens and resident aliens.

* * * * *

(b) *Resident aliens.* An applicant for aircraft registration under 49 U.S.C. 44102 who is a resident alien must furnish a representation of permanent residence and the applicant's alien registration number issued by the Department of Homeland Security.

* * * * *

■ 9. Add part 48 to read as follows:

PART 48—REGISTRATION AND MARKING REQUIREMENTS FOR SMALL UNMANNED AIRCRAFT

Subpart A—General

Subpart B—Certificates of Aircraft Registration for Small Unmanned Aircraft

Subpart C—Aircraft Marking

Authority: 49 U.S.C. 106(f), 106(g), 40101, 40103, 40113–40114, 41703, 44101–44103, 44105–44106, 44110–44113, 45302, 45305, 46104, 46301, 46306.

Subpart A—General

§ 48.1 Applicability.

(a) This part provides registration and identification requirements for small unmanned aircraft that are part of a small unmanned aircraft system as defined in § 1.1 of this chapter.

(b) Small unmanned aircraft eligible for registration in the United States must be registered and identified in accordance with either:

(1) The registration and identification requirements in this part; or

(2) The registration requirements in part 47 and the identification and registration marking requirements in subparts A and C of part 45.

(c) Small unmanned aircraft intended to be operated outside of the territorial airspace of the United States, or registered through a trust or voting trust, must be registered in accordance with subparts A and B of part 47 and satisfy the identification and registration marking requirements of subparts A and C of part 45.

§ 48.5 Compliance dates.

(a) *Small unmanned aircraft used exclusively as model aircraft.* For small unmanned aircraft operated by the current owner prior to December 21, 2015, compliance with the requirements of this part or part 47 is required no later than February 19, 2016. For all other small unmanned aircraft, compliance with this part is required prior to operation of the small unmanned aircraft.

(b) *Small unmanned aircraft used as other than model aircraft.* Small unmanned aircraft owners authorized to conduct operations other than model aircraft operations must register the small unmanned aircraft in accordance

with part 47 of this chapter. Beginning March 31, 2016, small unmanned aircraft operated as other than model aircraft may complete aircraft registration in accordance with this part.

§ 48.10 Definitions.

For purposes of this part, the following definitions apply:

Citizen of the United States or U.S. citizen means one of the following:

(1) An individual who is a citizen of the United States or one of its possessions.

(2) A partnership each of whose partners is an individual who is a citizen of the United States.

(3) A corporation or association organized under the laws of the United States or a State, the District of Columbia, or a territory or possession of the United States, of which the president and at least two-thirds of the board of directors and other managing officers are citizens of the United States, which is under the actual control of citizens of the United States, and in which at least 75 percent of the voting interest is owned or controlled by persons that are citizens of the United States.

Registry means the FAA, Civil Aviation Registry, Aircraft Registration Branch.

Resident alien means an individual citizen of a foreign country lawfully admitted for permanent residence in the United States as an immigrant in conformity with the regulations of the Department of Homeland Security (8 CFR Chapter 1).

§ 48.15 Requirement to register.

No person may operate a small unmanned aircraft that is eligible for registration under 49 U.S.C. 44101–44103 unless one of the following criteria has been satisfied:

(a) The owner has registered and marked the aircraft in accordance with this part;

(b) The aircraft weighs 0.55 pounds or less on takeoff, including everything that is on board or otherwise attached to the aircraft; or

(c) The aircraft is an aircraft of the Armed Forces of the United States.

§ 48.20 Eligibility for registration.

A small unmanned aircraft may be registered under 49 U.S.C. 44103 and under this part only when the aircraft is not registered under the laws of a foreign country and is—

(a) Owned by a U.S. citizen;

(b) Owned by an individual citizen of a foreign country lawfully admitted for permanent residence in the United States;

(c) Owned by a corporation not a citizen of the United States when the corporation is organized and doing business under the laws of the United States or a State within the United States, and the aircraft is based and primarily used in the United States; or

(d) An aircraft of—

(1) The United States Government; or

(2) A State, the District of Columbia, a territory or possession of the United States, or a political subdivision of a State, territory, or possession.

§ 48.25 Applicants.

(a) To register a small unmanned aircraft in the United States under this part, a person must provide the information required by § 48.100 to the Registry in the form and manner prescribed by the Administrator. Upon submission of this information, the FAA issues a Certificate of Aircraft Registration to that person.

(b) A small unmanned aircraft must be registered by its owner using the legal name of its owner, unless the owner is less than 13 years of age. If the owner is less than 13 years of age, then the small unmanned aircraft must be registered by a person who is at least 13 years of age.

(c) In accordance with 49 U.S.C. 44103(c), registration is not evidence of aircraft ownership in any proceeding in which ownership of an unmanned aircraft by a particular person is in issue.

(d) In this part, ''owner'' includes a buyer in possession, a bailee, a lessee of a small unmanned aircraft under a contract of conditional sale, and the assignee of that person.

§ 48.30 Fees.

(a) The fee for issuing or renewing a Certificate of Aircraft Registration for aircraft registered in accordance with § 48.100(a) is $5.00 per aircraft.

(b) The fee for issuing or renewing a Certificate of Aircraft Registration for aircraft registered in accordance with § 48.100(b) is $5.00 per certificate.

(c) Each application for and renewal of a Certificate of Aircraft Registration must be accompanied by the fee described in paragraphs (a) and (b), as applicable, paid to the Federal Aviation Administration through the web-based aircraft registration system, or in another manner if prescribed by the Administrator.

Subpart B—Certificates of Aircraft Registration for Small Unmanned Aircraft

§ 48.100 Application.

(a) *Required information: Persons intending to use the small unmanned aircraft as other than a model aircraft.* Each applicant for a Certificate of Aircraft Registration issued under this part must submit all of the following information to the Registry:

(1) Applicant name and, for an applicant other than an individual, the name of the authorized representative applying for a Certificate of Aircraft Registration.

(2) Applicant's physical address and, for an applicant other than an individual, the physical address for the authorized representative. If the applicant or authorized representative does not receive mail at their physical address, a mailing address must also be provided.

(3) Applicant's email address or, for applicants other than individuals, the email address of the authorized representative.

(4) The aircraft manufacturer and model name.

(5) The aircraft serial number, if available.

(6) Other information as required by the Administrator.

(b) *Required information: Individuals intending to use the small unmanned aircraft exclusively as a model aircraft.* Each applicant for a Certificate of Aircraft Registration issued under this part must submit all of the following information to the Registry:

(1) Applicant name.

(2) Applicant's physical address and if the applicant does not receive mail at their physical address, a mailing address must also be provided.

(3) Applicant's email address.

(4) Other information as required by the Administrator.

(c) *Provision of information.* The information identified in paragraphs (a) and (b) of this section must be submitted to the Registry through the Web-based small unmanned aircraft registration system in a form and manner prescribed by the Administrator.

(d) *Issuance of Certificate of Aircraft registration.* The FAA will issue a Certificate of Aircraft Registration upon completion of the application requirements provided in paragraph (a) or (b) of this section as applicable.

§ 48.105 Requirement to maintain current information.

(a) The holder of a Certificate of Aircraft Registration must ensure that the information provided under § 48.100 remains accurate.

(b) The holder of a Certificate of Aircraft Registration must update the information using the web-based small unmanned aircraft registration system within 14 calendar days of the following:

(1) A change in the information provided under § 48.100.

(2) When aircraft registration requires cancellation for any reason including sale or transfer, destruction, or export.

§ 48.110 Registration: Persons intending to use small unmanned aircraft for purposes other than as model aircraft.

(a) *Certificate of Aircraft Registration.* A Certificate of Aircraft Registration issued in accordance with § 48.100 for aircraft used for purposes other than as model aircraft constitutes registration only for the small unmanned aircraft identified on the application.

(b) *Effective date of registration.* An aircraft is registered when the applicant receives a Certificate of Aircraft Registration for the specific aircraft. The effective date of registration is shown by the date of issue on the Certificate of Aircraft Registration issued for the aircraft.

(c) *Registration renewal.* A Certificate of Aircraft registration issued under this part expires 3 years after the date of issue unless it is renewed.

(1) The holder of a Certificate of Aircraft Registration must renew the Certificate by verifying, in a form and manner prescribed by the Administrator, that the information provided in accordance with § 48.100 of this subpart is accurate and if it is not, provide updated information. The verification may take place at any time within the six months preceding the month in which the Certificate of Aircraft registration expires.

(2) A certificate issued under this paragraph expires three years from the expiration date of the previous certificate.

(d) *Other events affecting effectiveness of Certificate.* Each Certificate of Aircraft Registration issued by the FAA under this subpart is effective, unless registration has ended by reason of having been revoked, canceled, expired, or the ownership is transferred, until the date upon which one of the following events occurs:

(1) Subject to the Convention on the International Recognition of Rights in Aircraft when applicable, the aircraft is registered under the laws of a foreign country.

(2) The small unmanned aircraft is totally destroyed or scrapped.

(3) The holder of the Certificate of Aircraft Registration loses U.S. citizenship.

(4) Thirty days have elapsed since the death of the holder of the Certificate of Aircraft Registration.

(5) The owner, if an individual who is not a citizen of the United States, loses status as a resident alien, unless that person becomes a citizen of the United States at the same time.

(6) The owner is a corporation other than a corporation which is a citizen of the United States and one of the following events occurs:

(i) The corporation ceases to be lawfully organized and doing business under the laws of the United States or any State thereof; or

(ii) The aircraft was not operated exclusively within the United States during the period of registration under this part.

§ 48.115 Registration: Individuals intending to use small unmanned aircraft exclusively as a model aircraft.

(a) *Certificate of Aircraft Registration:* A Certificate of Aircraft Registration issued in accordance with § 48.100 for small unmanned aircraft used exclusively as model aircraft constitutes registration for all small unmanned aircraft used exclusively as model aircraft owned by the individual identified on the application.

(b) *Effective date of registration.* An aircraft is registered when the applicant receives a Certificate of Aircraft Registration. The effective date of registration is shown by the date of issue on the Certificate of Aircraft Registration issued under this part.

(c) *Registration renewal.* A Certificate of Aircraft registration issued under this part expires 3 years after the date of issue unless it is renewed.

(1) The holder of a Certificate of Aircraft Registration must renew the Certificate by verifying, in a form and manner prescribed by the Administrator, that the information provided in accordance with § 48.100(b) and (c) of this part is accurate and if it is not, provide updated information. The verification may take place at any time within the six months preceding the month in which the Certificate of Aircraft registration expires.

(2) A certificate issued under this paragraph expires three years from the expiration date of the previous certificate.

(d) *Other events affecting effectiveness of Certificate.* Each Certificate of Aircraft Registration issued by the FAA under this part is effective, unless registration has ended by reason of having been revoked, canceled or expired, or until the date upon which one of the following events occurs:

(1) The holder of the Certificate of Aircraft Registration loses U.S. citizenship.

(2) Thirty days have elapsed since the death of the holder of the Certificate of Aircraft Registration.

(3) The owner, if an individual who is not a citizen of the United States, loses status as a resident alien, unless that person becomes a citizen of the United States at the same time.

§ 48.120 Invalid registration.

The registration of a small unmanned aircraft is invalid if, at the time it is made—

(a) The aircraft is registered in a foreign country;

(b) The applicant is not the owner, except when the applicant registers on behalf of an owner who is under 13 years of age;

(c) The applicant is not eligible to submit an application under this part; or

(d) The interest of the applicant in the aircraft was created by a transaction that was not entered into in good faith, but rather was made to avoid (with or without the owner's knowledge) compliance with 49 U.S.C. 44101–44103.

§ 48.125 Foreign civil aircraft.

Except for corporations eligible to register under § 48.20(c), the FAA will issue a recognition of ownership to persons required to comply with the provisions of this part pursuant to an authorization to operate issued under part 375 of this title. The recognition of ownership does not have the effect of U.S. aircraft registration.

Subpart C—Aircraft Marking

§ 48.200 General.

(a) No person may operate a small unmanned aircraft registered in accordance with this part unless the aircraft displays a unique identifier in accordance with the requirements of § 48.205 of this subpart.

(b) A unique identifier is one of the following:

(1) The registration number issued to an individual or the registration number issued to the aircraft by the Registry upon completion of the registration process provided by this part; or

(2) If authorized by the Administrator and provided with the application for Certificate of Aircraft Registration under § 48.100 of this part, the small unmanned aircraft serial number.

§ 48.205 Display and location of unique identifier.

(a) The unique identifier must be maintained in a condition that is legible.

(b) The unique identifier must be affixed to the small unmanned aircraft by any means necessary to ensure that it will remain affixed for the duration of each operation.

(c) The unique identifier must be readily accessible and visible upon

inspection of the small unmanned aircraft. A unique identifier enclosed in a compartment is readily accessible if it can be accessed without the use of any tool.

PART 91—GENERAL OPERATING AND FLIGHT RULES

■ 10. The authority citation for part 91 continues to read as follows:

Authority: 49 U.S.C. 106(f), 106(g), 1155, 40101, 40103, 40105, 40113, 40120, 44101, 44111, 44701, 44704, 44709, 44711, 44712, 44715, 44716, 44717, 44722, 46306, 46315, 46316, 46504, 46506–46507, 47122, 47508, 47528–47531, 47534, articles 12 and 29 of the Convention on International Civil Aviation (61 Stat. 1180), (126 Stat. 11).

■ 11. In § 91.203, revise paragraph (a)(2) to read as follows:

§ 91.203 Civil aircraft: Certifications required.

(a) * * *

(2) An effective U.S. registration certificate issued to its owner or, for operation within the United States, the second copy of the Aircraft registration Application as provided for in § 47.31(c), a Certificate of Aircraft registration as provided in part 48, or a registration certification issued under the laws of a foreign country.

* * * * *

PART 375—NAVIGATION OF FOREIGN CIVIL AIRCRAFT WITHIN THE UNITED STATES

■ 12. The authority citation for part 375 continues to read as follows:

Authority: 49 U.S.C. 40102, 40103, and 41703.

■ 13. Revise § 375.11 to read as follows:

§ 375.11 Other Foreign Civil Aircraft.

A foreign civil aircraft, including unmanned aircraft as defined in § 1.1 of this title, other than those referred to in § 375.10 may be navigated in the United States only when:

(a) The operation is authorized by the Department under the provisions of this part, and

(b) The aircraft complies with any applicable airworthiness standards of the Federal Aviation Administration for its operation.

■ 14. Add § 375.38 to subpart D to read as follows:

§ 375.38 Other foreign civil aircraft: Small unmanned aircraft operated exclusively as model aircraft.

Foreign civil aircraft that are small unmanned aircraft used exclusively as model aircraft may be operated in the United States only when the individual:

(a) Completes the registration process in accordance with §§ 48.30, 48.100(b) and (c), 48.105, and 48.115 of this title;

(b) Identifies the aircraft in accordance with the aircraft marking requirements in §§ 48.200 and 48.205 of this title; and

(c) Complies with the requirements of Sec. 336 of Pub. L. 112–95 (Feb. 14, 2012).

Issued under the authority of 49 U.S.C. 106(f), 41703, 44101–44103, in Washington, DC on December 14, 2015.

Anthony R. Foxx,

Secretary of Transportation.

Michael P. Huerta,

Administrator.

[FR Doc. 2015–31750 Filed 12–15–15; 8:45 am]

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H.R. 2250/P.L. 114–96

Further Continuing Appropriations Act, 2016 (Dec. 11, 2015; 129 Stat. 2193)

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